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A. SPARRMAN'S ETHNOGRAPHICAL COLLECTION FROM JAMES COOK'S 2ND EXPEDITION
(1772—1775)

THE ETHNOGRAPHICAL MUSEUM OF SWEDEN, STOCKHOLM
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A. SPARRMAN'S
ETHNOGRAPHICAL COLLECTION
FROM JAMES COOK'S 2ND EXPEDITION
(1772—1775)

BY

J. SÖDERSTRÖM

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To the Memory of little B.-M. B.,
whom I will never forget.

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PREFACE

In prefacing the present work it is first of all my agreeable duty to express my most grateful thanks to the Trustees of the Längman Fund, of Upsala, who by their award of a sum for this purpose have made it at all possible for me even to think of getting this work printed. To this, Messrs. Bokförlags Aktiebolaget Thule have also contributed by generously advancing the balance needed for actually commissioning the printers. For this, as well as for the handsome get-up of the book, I am greatly indebted to them.

As will be mentioned in the following, it was my tutor, Professor Dr. Gerhard Lindblom, that originally drew my attention to the existence, in the Ethnographical Museum of Sweden, at Stockholm, of the old and valuable collection of objects from various Pacific islands, acquired during Captain James Cook's second expedition, that I am here going to discuss. The objects in question were brought together by the only Swede attached to the expedition, namely the botanist und physician, Anders Sparrman. Of the man himself and the course of the expedition, a brief record will here be given, together with certain other data that may be of interest in that connection.

For Professor Lindblom's kindness in entrusting me with the publication of the collection in question I am deeply grateful, as well as for the help he has on many occasions given me in the course of my work.

Among foreign scientists that in someway or other have afforded me assistance, particularly as regards the localization of a number of objects, there is in the first place to be mentioned Dr. P. H. Buck (Te Rangi Hiroa), Director of the Bernice Pauahi Bishop Museum at Honolulu, who has frequently helped me out by useful hints conveyed in his letters. I thank him most heartily for thus having placed his vast store of knowledge at my disposal. My thanks are also due to Dr. H. D. Skinner, Director of the Otago University Museum, Dunedin, New Zeeland, and to the Director of Museum für Völkerkunde at Basel, Dr. Felix Speiser.

Lastly, I wish to thank Mr. M. Leijer, of Gothenburg, for having translated my Swedish manuscript into English, and the artist, Mr. A. Hjelm, of Gothenburg, by whose hand all the drawings occurring in this book have been executed.

Jan Söderström.

INTRODUCTION

This second introductory section of the present publication of the Anders Sparrman South Sea collection I have, as will be noticed, given the heading "Introduction", although no introduction should — strictly speaking — hardly have been necessary. And this, not only because of the data I have just given in my preface, and of the two brief notices concerning the collection that in 1936 I published in "Ethnos", the new periodical of the State Ethnographical Museum of Sweden, Stockholm, but also in view of the fact that the Sparrman collection was not always so forgotten as it appears to have been in present times.

As is known, Dr. Sparrman himself published, in 1802 and 1818, as will be referred to in the following, a fairly exhaustive account of his Pacific voyage in the company of Captain Cook and the two Forsters, in which he also particularizes the majority of the objects that are here dealt with, and were brought home by him to Sweden. These objects were presented by him partly to the Swedish Academy of Science, and partly to at least one of his personal friends, viz. Dr. C. P. Thunberg. From that time onwards, no mention of the collection was, to the best of my knowledge, made in the scientific literature until 1893, when Professor Dr. E. H. Giglioli, vice-president of "Società Antropologica Italiana", in Vol. XXIII of "Archivio per l'Antropologia e l'Etnologia" published a description of an etnographical collection from Cook's third expedition, preserved in the Museum for Natural History and Physics at Florence. On p. 8 of that work, Giglioli refers to the existence of the Sparrman collection at Stockholm. A quotation of this reference may perhaps be of interest: "Vi notai pochi, ma interessanti oggetti riportati dallo Svedese Sparrmann, il quale fu compagno di Cook durante parte del suo secondo viaggio; tra essi rammenterò due ascie ed un bellissimo scalpello, immanicati, di basalto, provenienti da Tahiti, ed un'ascia di giada della Nuova Zelanda legata con corde di *Phormium* sopra un manico rozzo ed originale". In this Italian collection from Cook's third voyage there are a good many objects of the same kinds as those brought to Sweden by Sparrman. The existence of this collection at Florence, as well as of Giglioli's description of it, was, besides, referred to, and commented upon, in 1934 by Professor Antonio Mordini in Vol. LXIV of the same Italian journal. It also ought to be mentioned that the Swedish writer and explorer, Birger Mörner, a few years earlier published, at Stockholm, a popular book in Swedish, called "Söderhavet", in the first part of which (Stockholm 1923) he reproduced and described certain objects belonging to the Sparrman collection. In 1928 the well-known German physician and ethnographer, Karl von den Steinen, published the outstanding three-volume work that he called "Die Marquesaner und ihre Kunst". Here the Sparrman collection is referred to, and one or two of Sparrman's Marquesan objects are also illustrated and described. After this, the collection in question seems to fallen into oblivion until the present writer's attention was drawn to it by Professor Dr. Gerhard Lindblom, the present director of the State Ethnographical Museum of Sweden, who subsequently was kind enough to entrust me with the task of publishing it to its full extent.

My conception of this commission is that the present publication should principally constitute a description of the material, provided with respective data as to provenance given as accurately as possible, and designed to be of use to ethnologists and scientists in all parts of the world that are interested in the Pacific Islands, their peoples and cultures. To the plain description of the material — consisting of illustrations of the objects with accompanying brief texts — I have among other things added the two chapters that partly contain a short biography of Anders Sparrman and a summary of his account of his South Sea voyage, and partly a résumé of Captain Cook's entire second expedition, chiefly based on Sparrman's account of it. The fifth, and largest, chapter contains a fairly detailed description of the Sparrman objects, and in many cases also of other objects, allied to — or resembling — those contained in the collection. In this connection I have also frequently endeavoured to classify them, and to clarify their geographical provenance in cases where this has seemed more or less doubtful. Lastly, I have now and again advanced novel theories or given my opinion on certain debatable questions.

Before concluding this introduction I wish to emphasize that I have intentionally refrained from entering upon many interesting questions that have presented themselves in the course of this work, and from declaring any definite standpoint towards several problems that in dealing with this collection might, perhaps, appropriately have been subjected to an attempt at solving as far as possible, particularly in view of the scientific value that the Sparrman collection undoubtedly possesses.

Finally, I am mildly hoping that such conclusions as I have considered myself justified in drawing, and the results I have here given of my investigations, may not be found too glaringly at fault. I also hope that more experienced researchers will in some degree find it profitable, in the interest of ethnology and the study of cultural history, to make use of the material contained in this publication, which is herewith especially placed at the disposal of the branch of science that more than any other occupies itself with mankind, the history of man, and the history of his creative power.

1. ANDERS SPARRMAN

The Swedish naturalist and physician, Anders Sparrman — beyond the borders of his native country chiefly known through his into several languages translated travel accounts dealing with South African nature life and ethnography — was born on the 27th of February 1748.

His school-days being over, he studied at the University of Upsala, where he became one of Linné's most valued disciples. At the age of 17 he made his first foreign voyage, when as a ship's surgeon he accompanied one of the Swedish East India Company's ships on a voyage to India and China. On his return home he joined, in 1768, the "Chirurgical Society" as a student, whence two years later he qualified as a physician. Next came another lengthy voyage. From the authorities at the Cape of Good Hope he had obtained permission to pursue scientific studies in South Africa, and on January 1772 he sailed in the East India Company's ship "Stockholms Slott" from Gothenburg for Capetown.

In South Africa, Sparrman devoted some months to studying the country as well as the natives, but in November of that year his African studies were interrupted. This was in consequence of the arrival at Capetown at that time of Cook's second expedition, consisting of the two ships, the "Resolution" and the "Adventure". Through the good offices of the Forsters, father and son, two botanists forming part of the expedition, he was given permission by Cook to accompany it on its tour of the South Seas in the capacity of the Forsters' scientific assistant. It was in the course of this expedition that Sparrman acquired the ethnographical objects the publishing of which forms the main purpose of the present work. He also published a travel account to which I shall recur presently.

On his return to the Cape in 1775, Sparrman for some time resumed his researches and added to his natural history and ethnographical collections from South Africa, whereupon he in the following year returned to Sweden. Here many marks of honour were conferred upon him, and he was also made a member of several Swedish and foreign learned societies. Apart from a voyage to West Africa, where he went for the purpose of selecting a suitable site for a projected Swedish colony, and visits to Paris and London, he stayed for the rest of his life in his home country, chiefly occupying himself with writing scientific essays and publishing an account of his travels. During the years 1778—1798 he presided over the Royal Academy of Science's "Cabinet", to which he had presented the greater part of the ethnographical objects that he had collected from abroad. — Anders Sparrman died at Stockholm on the 9th of August 1820, aged 72.

— — —

Of the essays and travel accounts published by Dr. Anders Sparrman we are in the present connection only interested in his large work, published in two parts, entitled *"Resa till Goda Hopps-Udden, Södra Polkretsen Och Omkring Jordklotet, Samt till Hottentott- och Caffer-Landen, Åren 1772—76, Af ANDERS SPARRMAN . . ."*. (A Voyage to the Cape of Good Hope, the Antarctic, and Round the World, as well as to the Hottentot and Kaffir Countries, in the years 1772—76, By Anders Sparrman). This travel account was, as mentioned, published in two parts, the first of which, printed at Stockholm in 1783, almost exclusively deals with South Africa. The South Sea voyage is by Sparrman only quite briefly referred to, for the sake of chronological sequence, merely occupying a space of 20 pages, and he foreshadows the further publication of a more detailed account of this voyage This first part, dealing with Africa and printed in 1783, was translated into several languages. It appeared in English in 1785, in German in 1784, and in French and Dutch in 1787. The English version bears the title "A voyage to the Cape of Good Hope, towards the antarctic polar circle, etc., by Andrew Sparrman, M. D.".

Part II of the travel account deals exclusively with his South Sea voyage and was published in two sections of, in all, 413 pages, printed at Stockholm in 1802 and 1818, respectively. The subtitle of this second part, which — so far as I can find — has never, with only one exception, been translated from the Swedish, runs: *"Resa omkring Jordklotet i sällskap med Kapit. J. Cook och Hrr Forster. Åren 1772, 73, 74 och 1775. Förrättad och beskriven av Anders Sparrman . . ."*. ("A Voyage round the World with Capt. J. Cook and Mrs. Forster. Encompassing the years 1772—1775. Undertaken and described by Anders Sparrman . . ."). The above-mentioned exception is Bjarne Kroepeliens edition of parts of the Sparrman books in French, published by him in 1939, together with a biography of Sparrman, etc. (Un Compagnon Suédois du Capitain James Cook, Oslo 1939). By way of illustrations there are in the full edition 12 small and 3 large pictures, reproduced from Cook's work, 5 drawings, including one representing an Easter Island statue, and a map of the Southern "hemisphere" containing the latest discoveries down to 1802, which Sparrman had had compiled from Forster's map and provided with his own amendments. Gummed into the books are, besides, pieces of tapa — white tapa from Tahiti, and coloured tapa from the Tonga Islands.

The Pacific part of the work contains a complete and detailed description of the progress of Cook's second expedition and of all its interesting experiences, both grave and tragicomic, or even solely ludicrous, told in an interest-rousing language which at time strikes us as naïve. There are in addition lists of the objects collected by the author, together with their descriptions and mode of use, as well as descriptions of countries and peoples.

2. JAMES COOK'S SECOND EXPEDITION TO THE PACIFIC IN 1772—1775

The chapter here following contains a brief résumé of Captain James Cook's second expedition to the Pacific in 1772—1775 with the ships "Resolution" and "Adventure", taken from Anders Sparrman's account of it in Part II of his work.

The first section of Part II (II: 1) begins in its opening chapter with a description from other sources of the fitting out of the two ships of the expedition in England, the aim of the expedition, its departure from England and arrival at the Cape. Having in the second and third chapters dealt with "The First Antarctic Campaign, etc.", towards the end of Chapter 4 Sparrman describes the arrival of the expedition at New Zealand. For on March 26th, 1773, "Dusky Bay" in South Island was reached. In that region only a very few of the country's inhabitants were met with. As to this, Sparrman inter alia writes (II: 1, p. 61): "During our stay in Dusky Bay, and in the course of our exploration of all its ramifications, or arms, which in all extend for more than 100 English miles, we however only encountered some few, small families". According to Sparrman, the Maories were square-built, with strong and sinewy arms, "while their legs and knees (presumably from sitting in a cramped position in their boats in their daily pursuit of fishing) were bent and crooked" (II: 1, p. 75).

From New Zealand the course was set for Tahiti, where the natives were found to be of average stature, "and of a well-disposed and cheerful appearance". Their skin was of a light-brown colour, their eyes gleaming black, and the hair often frizzly. Regarding the dress of the Tahitians he mentions among other things that they occasionally don a garment called *"Tiputa"*, which has an opening in the centre, by means of which it is slipped over the head and neck. In this connection he says in a footnote: "Compare this with the Spaniards' *Poncho,* or *Chony,* in *Monte Video . . ."* (II: 1, p. 103). Between the last two pages of Part II: 1 is gummed a snippet of white Tahitian tapa, 6.5 cm. long and 3.5 cm. wide. — Beside "Otaheiti", during the stay in the Society Islands the twin island "Huaheine" (Huaheine-nui, and Huaheine-iti) as well as "Rayetea" (Ra'iatea) and "Otaha" (Taha'a) were also visited.

Section 2. of Part II (II: 2) begins by describing the departure from the Society

Islands and the arrival at the Tonga Islands. The first island on which they landed was "Eauve" (Eua), which Sparrman also calls "Middelburg", after Tasman. In Sparrman's opinion the cultivated landscape on Eua was remarkable for "a higher degree of culture than found on the Society Islands" (II: 2, p. 6). He also gives praise to their carvings in wood, "which, apart from being executed with neatness and taste, are given an excellent polish and smoothness, not only as regards their smaller craft but also the paddles or oars, . . . , and their spears are provided with large barbs, etc." (II: 2, pp. 6, 7). Of various habits and customs Sparrman inter alia refers to finger-mutilations (II: 2, pp. 14, 15), which had already been observed by Tasman (p. 27). (See besides the author's own treatise on ritual finger-mutilations in the Pacific and Australia, published in German in Zeitschrift für Ethnologie [1938, Heft 1—2, pp. 24—47]).

From "New Amsterdam" (Tongatabu). which was also visited, the expedition on October 7th, 1773, again struck out for New Zealand, where on this occasion among other things ocular evidence of the existence of cannibalism was obtained. Having subsequently made his second "South-Polar, or Ice, Campaign", on March 13th, 1774, Cook cast anchor off Easter Island. (The "Adventure", the second ship of the expedition, had been lost sight of during a storm on the 30th of October in the preceding year — as we know for the remainder of the time the expedition lasted). Of the material culture of Easter Island Sparrman naturally in the first place refers to its statues, one of which he illustrates by a wood-cut (II: 2, p. 52). It is to be regretted that he does not seem to have brought home any object from Easter Island. None such is at all events found among the collections of the State Ethnographical Museum of Sweden, nor does Sparrman himself make any mention of having collected anything from Easter Island, either in his book or in his original inventory. As to this, the sole exception is found in a Marquesan breast ornament that in the original inventory has been erroneously localized.

On March 16th the expedition sailed from Easter Island, and on April 6th "Hood's Island" (Fatuhuku) of the Marquesas group was discovered. On the following day the "Resolution" anchored off Tahuata, where they were received by a large number of natives who "in their boats had brought with them quantities of throwing and sling stones, while they wore the slings themselves wound round the forehead . . ." (II: 2, p. 61). In this connection the author mentions the tattoed men, but says of the women, "none of whom were tattoed" (although here Sparrman is mistaken), that they were "whiter than those of any other nation living in the South Seas, in spite of their living so close to the equator". The reason for this is their inhabiting a region which is "well wooded and shady, besides being situated on a mountainous island rising directly from the seashore". — From this group of islands, as well as from New Zealand, Tahiti and Tonga, Sparrman collected a fair number of ethnographical objects.

From the Marquesas the expedition set sail on April 11th, 1774, and, via "Teokea"

(Takaroa) and other atolls of King George's Group (the Paumotus) on April 21 the "Resolution" again arrived at Tahiti. After visits to Huahine and Raiatea, and necessary provisioning, departure from this group of islands was made on June 4th. On the 21st of that month was for the first time discovered Savage Island, where the inhabitants "were painted in coal-black, red and white, in a variety of repulsive stripings . . .", and charged en masse towards the landing Europeans "whilst uttering warlike, mumbling noises, dancing and gesticulating in the manner characteristic of savages". From Niue, Cook sailed to the Tonga Islands, whence departure was again made on May 29th, when he set out for the New Hebrides in Melanesia.

"On the 21st of July we anchored off Mallicolo, on the western side, ... From there we sailed on the 23rd. On August 24th we discovered Iromanga, which we paid a brief visit. . . . On the following day we discovered Tanna . . ." (II: 2, p. 97). The natives of Malekula, Sparrman says, were of small and slender stature, with short, crisp hair. These natives were, "both by nature and by means of painting, of a blackish hue" (II: 2, p. 98). The reputedly "poisoned" arrows proved, when experimented with on dogs, to be completely harmless in that respect. From what he mentions in his book (II: 2, p. 100), on his return to Sweden Sparrman presented a bow and appurtenant arrows, from Malekula, to the collections of the Swedish Academy of Science. These objects are, however, nowadays not to be found.

After an unsuccessful attempt at landing on "Irromanga", where the natives "were of average stature, and fairly handsome of feature and build . . ." (II: 2, p. 112), the expedition reached Tanna on August 5th. The Tannese are described as slender-built, of average height, or less, with black and frizzled hair, flat nose, and "soot-brown" complexion. Of material objects they, among other things, possessed canoes, "quite rudely sewn together of rough and unplaned planks", (II: 2, p. 120), throwing-spears hurled "by means of short sling, at one end provided with a loop into which the forefinger is placed, and at the other with a knot of the size of a musket-ball . . ." (II: 2, p. 138). Spear-slings of this type were also found in New Caledonia, which was discovered on September 4th. The New Caledonian spear-slings were however "of better quality, and more elegantly knitted, with hairs of bats worked in" (II: 2, p. 138). The author also mentions the tall, black hats, the circular huts with "pointedly convex, or conical, roofs", supported by "a central pole, which protruded high above the roof" (II: 2, p. 153). Inside the dwellings were two fireplaces and, besides, "much reek of smoke, and dirtiness . . ." The latter circumstance he supposes to be a contributary cause of the duskiness of the complexion of the inmates of the huts. Sparrman further noticed double-hulled canoes, "fashioned out of two hollowed logs set three feet apart", fitted with "gunwales, on top of which were placed cross-beams and a deck carrying a fireplace in which there is always burning a fire for warmth, drying of clothes, and fish-baking". (II: 2, pp. 164, 165). These craft were provided with "sails made of mats".

On October 3rd the expedition left New Caledonia, and on the 10th was discovered a lofty island which was named Norfolk Island, and proved to be uninhabited. On October 17th the "Resolution" for the third, and last, time made New Zealand. In a section entitled "Appendix concerning New Zeeland", Sparrman describes a number of objects pertaining to Maori civilization, including canoes rigged with sails that were extended between "two poles set abreast of each other ..." (II: 2, p. 196).

Departure from New Zealand was made on November 10th, and, after a long voyage by way of Cape Horn, on the 21st of March 1775 the "Resolution" anchored off Capetown.

3. THE COLLECTION

LIST OF THE SPARRMAN COLLECTION.

The following is a list of ethnographical objects from the Pacific Ocean, collected during James Cook's second expedition 1772—1775 by Anders Sparrman and preserved in the State Ethnographical Museum, at Stockholm. The sequence adopted in this list does not agree with that used in Sparrman's own inventory, which still exists in the archives of the museum, or with the route of Cook's expedition, but has for certain reasons been arranged mainly according to geographical sequence from east to west.

The numbers that in the present list are entered after each object, constitute in almost every instance the numbers with which the objects are marked, or — in cases where the original number slip has got lost — the numbers by which the objects are registered in the Museum catalogues. One exception in this respect is No. 10 (the adze), which was not marked with any number at all, and therefore could not be found in any catalogue by the author, though he found it in Sparrman's own writings, as referred to in the text, Chapter 4. As will be noted, these numbers are not here occurring in any ordered sequence, and are in some cases of different appearance, e. g. 1799. 2, or RM. The objects numbered 1799. 2 form part of the Sparrman collection that was the second of the ethnographical collections presented 1799 to the "Cabinet" of the Royal Academy of Science. Subsequently the State-owned ethnographical collections in Sweden became a section of the National Museum of Natural History ("Naturhistoriska Riksmuseets Etnografiska avdelning"), of which the exhibits marked "RM" bear witness, which section since 1935 is changed to an independent museum, viz. The Ethnographical Museum of Sweden, Stockholm.

As regards this heterogeneous numbering, it would perhaps have been more practical to make a radical change in the entire cataloguing system and even to renumber the objects themselves in a way that would better conform to the technically more practical principles that in most modern museums have had to be adopted, often on account of experiences that have been of a rather sad nature. After much pondering of this question, the author however decided to leave the old numbering untouched, and this for several different reasons. One of the more important of these was that a renumbering of the objects would in many cases involve some — even though slight — degree of damage, and another, that with regard to two of the objects here dealt with, viz. No. 10 (the adz) and No. 43 (the pouwhenua) we are not yet in a position to prove with certainty that they originally formed part of Sparrman's collection, even though this be in the highest degree probable. Apart from this, the question as to the suitableness of the order in which I have here dealt with the various objects may also be open to discussion. Whatever the outcome of such a discussion, the author has nevertheless considered the order here adopted by him as being the most suitable.

— — —

Marquesas Islands:

1. Mother-of-pearl diadem. (1799. 2. 25.) Plate I, Fig. 1.
2. „ „ (1799. 2. 26.) Plate I, Fig. 2.
3. Wooden breast ornament. (1799. 2. 27.) Plate II, Fig. 1.
4. Fan. (1799. 2. 28.) Plate II, Fig. 3.

Tahiti:

5. Bow. (1799. 2. 20.) Plate III, Fig. 2.
6. Quiver. (1799. 2. 21a.) Plate III, Fig. 1.
7. Arrow. (1799. 2. 21b.) Plate III, Fig. 1.
8. „ (1799. 2. 21c.) Plate III, Fig. 1.
9. „ (1799. 2. 21d.) Plate III, Fig. 1.
10. Adz. (1799. 2. 51.) Plate IV, Fig. 1, and Plate V.
11. Poi-pounder. (1799. 2. 7.) Plate VIII, Fig. 2.
12. Tapa mallet. (1799. 2. 11.) Plate IV, Fig. 2.
13. Low, wooden stool. (1799. 2. 8.) Plate VI, Fig. 1.
14. „ „ „ (RM 1405.) Plate VI, Fig. 2.
15. Wooden pillow. (RM 377.) Plate VII, Fig. 1.
16. „ „ (RM 1404.) Plate VII, Fig. 2.
17. Ear ornament of Cypraea moneta, and glass beads. (1799. 2. 14.) Plate IV, Fig. 3.
18. Ear ornament. (1799. 2. 22.) Plate IX, Fig. 1.
19. „ „ (1799. 2. 22.) Plate IX, Fig. 2.
20. Tattooing comb. (1799. 2. 24.) Plate IX, Fig. 3.
21. Head-dress of black human hair. (1799. 2. 15.) Plate IX, Fig. 4.
22. Breast ornament, decorated with feathers and shark teeth. (1799. 2. 16.) Plate II, Fig. 2, and Plate XI, Fig. 1.

Tonga Islands:

23. War club. (1799. 2. 37.) Plate XVII, Fig. 1.
24. „ „ (1799. 2. 38.) Plate XVII, Fig. 2.

25. Bow. (1799. 2. 39.) Plate III, Fig. 3, *a* and *b*.
26. Arrow. (1799. 2. 40.) Plate III, Fig. 3, *a* and *b*.
27. Chisel (of basalt, with wooden handle). (1799. 2. 10.) Plate X, Fig. 1.
28. Rat-safe. (1799. 2. 9.) Plate VIII, Fig. 1 *a*, and 1 *b*.
29. Trolling hook (composite). (1799. 2. 19.) Plate XII, Fig. 4.
30. Canoe-paddle. (1799. 2. 36.) Plate XXIII, Fig. 4.
31. Pan-pipe. (1799. 2. 35.) Plate XVI, Fig. 2.
32. Wooden pillow. (RM 367.) Plate XI, Fig. 2.
33. Comb. (1799. 2. 12.) Plate XII, Fig. 1.
34. „ (1799. 2. 13.) Plate XII, Fig. 3.
35. Garment. (1799. 2. 23.) Plate XIII.
36. Necklace. (1799. 2. 29.) Plate XIV, Fig. 3.
37. „ (1799. 2. 29.) Plate XIV, Fig. 1.
38. „ (1799. 2. 30.) Plate XIV, Fig. 2.
39. „ (1799. 2. 31.) Plate XXII, Fig. 3.
40. Bracelet. (1799. 2. 32.) Plate X, Fig. 2.
41. Basket. (1799. 2. 33.) Plate XV, Fig. 2.
42. „ (1799. 2. 34.) Plate XV, Fig. 1.

New Zealand:

43. Wooden weapon (pouwhenua). (1799. 2. 6.) Plate XVII, Fig. 3, *a* and *b*.
44. War club (mere), of polished basalt. (1799. 2. 5.) Plate XVIII, Fig. 2.
45. Adz, of greenstone with wooden handle. (1799. 2. 4.) Plate XIX, Fig. 3.
46. Mantle, of Phormium tenax. (1799. 2. 2.) Plate XX.
47. (Nose-) flute, of wood (short). (1799. 2. 18.) Plate XIX, Fig. 2.
48. Toggle, of bone. (1799. 2. 3.) Plate XIX, Fig. 1.
49. Comb, of whalebone. (1799. 2. 1.) Plate XVIII, Fig. 1.

New Caledonia:

50. War club, of wood. (1799. 2. 48.) Plate XXI, Fig. 1.
51. „ „ „ „ (1799. 2. 49.) Plate XXI, Fig. 2.
52. Comb (long, with movable teeth). (1799. 2. 47) Plate XVI, Fig. 1.

Tanna:

53. Stone sling. (1799. 2. 50.) Plate XXII, Fig. 2.
54. Spear. (1799. 2. 44.) Plate XXIII, Fig. 1.
55. Arrow with several points. (1799. 2. 45.) Plate XXIII, Fig. 2.
56. „ „ „ „ (1799. 2. 46.) Plate XXIII, Fig. 3.
57. Basket. (1799. 2. 43.) Plate XV, Fig. 3.
58. Necklace, of rings made of tortoise-shell. (1799. 2. 42.) Plate XXII, Fig. 1.
59. Comb, of tortoise-shell. (1799. 2. 42.) Plate XII, Fig. 2.

4. DESCRIPTION OF THE OBJECTS FOUND IN THE SPARRMAN COLLECTION, WITH LOCALITIES OF ORIGIN SPECIFIED

The chapter here following contains a description of the objects included in the above collection, their appearance and mode of usage, as well as in many cases also of similar or related objects. Attempts will also be made at clarifying their respective provenances, that is to say places of derivation or, possibly, manufacture, especially in cases where Sparrman himself has noted down doubtful, or even definitely erroneous, data in these respects. The geographical sequence follows that given in Chapter 3.

The first four objects appearing in the inventory all belong to well known and familiar types, frequently described and depicted both in earlier and later literature, by reason of which we may unhesitatingly put them down as deriving from the *Marquesas Islands.*

The Marquesas Islands.

The ***uhikana,*** *No. 1,* (1799. 2. 25.) belongs to the more simple type that lacks the open-work plates of tortoise-shell in front of the mother-of-pearl plate, the ***uhi***. Our ***uhikana*** No. 1 has been illustrated by von den Steinen (*α* F I), who also refers to a similar ***uhikana*** from the British Museum and Dunkirk (Vol. II, pp. 17, 18). Linton makes no mention of this simple type but only of the more elaborate one to which our *No. 2* (1799. 2. 26.) belongs. It is perhaps only this type, fitted with tortoiseshell, that has a valid claim to the appellation ***uhikana,*** seeing that ***kana,*** according to v. d. Steinen (Vol. II, p. 18) means "glistening" or "lustrous", epithets which in this connection would not refer to the mother-of-pearl, but to the ornately worked tortoise-shell. From Sparrman's account of his travels (II: 2, p. 61) it appears that he acquired both his ***uhikana*** specimens in *Tahuata* ("Christina"), i. e. in the S. W. group. V. d. Steinen, that eminent specialist on the Marquesas, likewise observed this type of ornament only in the S. W. group, where it appears to have survived longest. Whether in earlier times it was in use on all the islands of the group I cannot say for absolutely certain. Langsdorff (p. 147), and Krusenstern (p. 224), do not describe any ornament that is with certainty identifiable as being an ***uhikana.*** Krusenstern (op. cit.) however states that in the N. W. group almost exactly similar ("fast ganz die nämlichen") ornaments were found as those collected by the Cook expedition in the S. W. group. Whether the *uhikana* was included among those is not with certainty ascertainable, but does not by any means appear impossible.

Sparrman (op. cit.), who refers to the *uhikana* as "a kind of diadem or *bandeau royal*", gives the following description of it: "the diadem consists of a flat piece of mother-of-pearl, partly overlaid with an artistically sculptured sheet of tortoise-shell. This ornament, together with one or more small pieces of pearl-oyster shell, and the plumes, contrast very pleasantly with the face and body, which are always heavily tattooed and thereby quite dark in colour". In this connection he refers to small pieces of pearl-oyster shell, and then presumably alludes to the small, tongue-shaped pieces of mother-of-pearl that in certain *uhikanas* are attached to either end of the braided fillet (See v. d. Steinen, Pl. α F 5). The plumes referred to by Sparrman were black cock feathers, attached to the back of the diadem, as in No. 1.

1. Length (exclusive of strings), 41 cm. Width across, 4 cm. Diameter of mother-of-pearl disk, 10.5 cm.

2. Length (exclusive of strings), 49 cm. Width across, 6.5 cm. Diameter of the largest mother-of-pearl disk, 13.5 cm. That of the largest tortoise-shell disk, 10.5 cm.

The next Marquesan object is *No. 3,* (1799. 2. 27), in Sparrman's own catalogue described as follows: "a circular gorget (set) with red peas (Abrus precatorius) from Easter Island". "From Easter Island" he must have put down by sheer oversight, because in his book (II: 2, p. 63) he mentions that the ornamental object in question occurred on "Christina", where it is "properly used by chiefs". Regarding its appearance he writes that it is made of "some light kind of wood, on its upper side covered with some sort of red peas, glued on, each marked with a black spot . . . ", thus evidently *Abrus precatorius,* the name also given by Sparrman, together with "grains d'Afrique".

This type of *wooden breast ornament,* as I should prefer to call it, is in Linton (p.428) referred to as "large collars, or gorgets . . . ". V. d. Steinen (Vol. II, p. 26) calls it, as also Sparrman does, "Ringkragen". Handy (The Native Culture in the Marquesas etc., p. 290, fig. 25, b), who depicts this ornament after Edge-Partington and Heape (Series I, 45, No. 2) describes it in the text accompanying the picture as "gorget made of wood and seed", and also cites, in part, Cook's and von Langsdorff's descriptions of it. According to v. d. Steinen, its Marquesan name was *tahi poniu,* meaning "united", "Einheit aus Kranzerbsen". Linton illustrates in Plate LXXXVIII (Nos. 3 and 4) two breast ornaments of this type from the Peabody Museum, at Salem.

No. 2 is, as Linton himself thinks probable, not a breast ornament, but a head ornament. These objects were partly made of wood, like that depicted by Linton, and partly of a piece of calabash shell. The Ethnographical Museum of Sweden, at

Stockholm, possesses a head ornament made of calabash, decorated with Abrus peas and strips plaited of tapa and *fau* bark, numbered 06.54.12.

These breast ornaments all consisted of an inner, and thicker, part devoid of stuck-on Abrus peas, and an outer, thinner portion with peas glued on to it. In addition, the outer edge was occasionally toothed, while the Abrus peas did not cover the entire surface, but were glued on in radiating rows, as in Forster. Forster's illustration has been reproduced by v. d. Steinen (Pl. α H 10). At Leyden there is a specimen consisting of a one-piece, horseshoe-shaped piece of wood, with Abrus peas radially pasted on (v. d. Steinen: Vol. II, p. 27). The *tahi-poniu* we are here concerned with had in its original state an even, not toothed, outer edge, and the peas were evenly distributed over its surface. The radiating strips of wood, 15 in number, were not glued to each other, but only held together by the two strings that were run through them for that purpose. Its upper surface originally had the same appearance as the specimen depicted by v. d. Steinen (α H 12), which was collected by the Krusenstern expedition and now preserved at Zürich.

3. Dimensions of the central wooden piece: length, 10 cm.; the unornamented surface at the top, 2 cm.; the bottom one, 6 cm.; thickness of the inner edge, 3.6 cm.

On his "Tab. 7.", representing "Chief on one of the Marquesas Islands", which Sparrman has reproduced from a copperplate picture in Cook's travel account, where it is called "Chief at St. Christina" (p. 310, Plate XXXVI), the man wears on his head the before mentioned "bandeau royal", and on his breast the breast ornament.

No. 4 of the collection consists of a "fan, or winnowing instrument", (tafií, tahií, or tahi'i), of the type most commonly met with in Marquesan collections, with a semi-oval blade. These fans have an ornamented handle, generally consisting of four *tiki* figures in two pairs, one above the other, with each pair set back to back. The handle was either of wood, or whalebone, or of human bone. In the lastmentioned case the handle was threaded outside the wooden stick that continued upwards through the greater part of the blade. Where the handle was solely of wood, then it was made in one piece with the sliver plaited into the blade. This particular fan has a handle of this kind, in one piece with the sliver, but, as apparent from the illustration, it is not ornamented, only having in its lower end a swollen termination. In this fan the blade resembles in shape that of the specimens depicted by Linton, Pl. LXVII, A (Peabody Museum) and v. d. Steinen, α S 3 and 4 (Oxford, Cook 1774). The Ethnographical Museum of Sweden also possesses a semi-oval fan with a carved wooden handle, 06.54.4, depicted by v. d. Steinen, α S 5. Fans of this type were reserved for chiefs and other persons of high degree. Among other types of fans there was one with a rhomboid blade (v. d. Steinen: Vol. II, p. 56, and α S 1 and 2). This explorer also succeeded in acquiring, in Atuona, an entirely unique fan with a kidney-shaped blade, a handle consisting of three bone *tiki* tied together, and with a tuft of black hair tied on to it, which was said to originate from the creator-god, *Atea* (v. d. Steinen: Vol. II, pp. 56 and 57, Abb. 44). In the case of the majority of the Marquesan fans the locality of origin is not specified, and it may be supposed that they existed on all the islands of the group.

The fan described by Linton (p. 385; Pl. LXVII, C) with its blade of tortoise-shell, "collected in Atu Ona, Hiva Oa", has as regards its unusual material, so far as I know, its nearest counterpart in the Marshall Islands. The Ethnographical Museum of Sweden possesses tortoise-shell fans, with rather small, oval blades, from those parts.

4. Length overall, 48 cm. The total length of the shaft is 39.5 cm., the grip occupying 11 cm. The blade measures 46 cm. across its widest part, with a width at the top of 45 cm.

The Tahiti Islands.

The bow, No. 5, 1799. 2. 20., is the first of the objects from *Tahiti.* Bows were, as we know, comparatively rare in Polynesia, but the Society Islands are one of the island groups in which it is with certainty known that bows were used, and whence even the earliest explorers make reference to it. As in most other parts of Polynesia, in Tahiti the bow was not used as a weapon of war, at any rate not in the European era. Of this bow Sparrman says in his catalogue: "Bow of wood from the bread-fruit tree, all white, with appurtenant bamboo quiver containing reed arrows, from *Otaheite.* N. B.: never used for fighting".

That this bow actually derives from Tahiti cannot either well be in doubt. Like the arrows belonging to it, it agrees in point of appearance with the Tahitian bows described by Ellis (1831, Vol. I, pp. 217—219). He says inter alia:

"The bows were made of the light, tough wood of the *purau;* and were, when unstrung, perfectly straight, about five feet long; an inch, or an inch and a quarter, in diameter in the centre, but smaller at the ends. They were neatly polished, and sometimes ornamented with finely braided human hair, or cord of the fibres of cocoa-nut husk, wound round the ends of the bow in alternate rings. The string was of *ramaha,* or native flax;".

With a possible exception for the material of the bowstring and the ornamentation, this description tallies quite well with the appearance of the bow we are here dealing with. Here is the light, polished wood, as well as the shape with tapering ends. Its dimensions are roughly similar. But even more conforming to the appearance of "our" bow is the one preserved in the museum at Florence, which originates from Cook's third expedition and has been described by Giglioli (p. 62). Especially significant is in my opinion the oval section of the bow-stave, mention of which is made in Giglioli's description. According to this, the bow is "semplice in forma, robusto, a sezione ovoide, colle due estremità gradatamente assottigliate, ma troncate e prive di qualsiasi solco od intaccatúra per assicurare la corda;". Here, as will be noted, is also found the simple form of the Sparrman bow, its strong stave, its oval section, tapering ends, and the absence of notches for the fastening of the string. The bow from *Takapota,* described by Frobenius (p. 227), the "Tahiti-Paumoto-Bogen", has its stave of about the same shape as the Sparrman bow, but is along the flat outer side reinforced with a cord plaited of coco-nut fibre, besides being to its full length wound with "Sinnet". In addition the ends are reinforced with fishbone, and the string secured in notches. Hence this bow, apart from the shape of the stave (the notches for the string excepted) is rather different from the Sparrman bow and the bows collected, or referred to, by earlier visitors to these parts. It is of course difficult to determine whether bows of the type described by Frobenius (preserved in the Leipzig Museum) have also existed in Tahiti, as Frobenius maintains.

On the basis of Ellis' statements, and taking also into consideration the bows that were brought back to Europe by Cook's second and third expeditions, with regard to the Leipzig bow I incline to the opinion that the fishbone inlay, and the full-length winding-over of the bow-stave with fibre, give very strong indication that this bow belonged to a more aristocratic form of ceremonial shooting-weapons than that in which the Sparrman bow should be classed. If it be true that it comes from the Tuamotu Islands, it is of course possible that the fishbone inlay, and the other adjuncts that distinguish it from the Sparrman type, have been added in the island group just referred to. This does not, however, appear to me very probable, seeing that, generally speaking, the Tuamotu island culture, owing to considerably harsher conditions of life in that region, may be said to have formed a somewhat degenerate off-shoot of the central Oceanic culture that prevailed in the islands of the Tahiti group. (It is besides remarkable that Frobenius does not cite Ellis as an authority with regard to the bows of Tahiti).

It is an established fact that the Tahitians, at all events as far back as our knowledge goes, did not use bows and arrows as weapons of war. This was also the case in most of the Polynesian island groups where the bow and arrow was at all known. As regards at least one group of islands I should however like to express an opinion at variance with the current view. In this respect I am referring to the *Marquesas.* Such authors as I have consulted regarding Marquesan weapons of war all deny that in the Marquesas the bow was ever anything of the kind. Both v. d. Steinen, Handy and Linton are unanimous on that point. Although Handy mentions (The Native Culture in the Marquesas etc., p. 129) that a chief in *Pua Ma'u* "insists that prior to that time (the European discovery) natives had once used the bow (*pana*)", therefore as a war weapon, he farther on says that "it is very doubtful whether it was ever used as a weapon in war". Against this supposition of Handy's stands not only the statement made by the chief at Pua Ma'u, whom he himself has quoted, but also a passage in Quirós (The voyages of etc.), pilot to Adelantado Alonso de Mendana de Neira, the discoverer of the S. E. group. In Clements Markham's English translation of Quirós diary, p. 23, we read: "What I have to say is, that some of these natives, being strong and courageous, used arrows, while there were not wanting others who seemed more cautious". In Spanish (Historia del descubrimiento etc.), "Lo que yo sé decir es que si como estos indios son fuertes y animosos usan flechas, que no fatturan más cuidados que vieron". From this passage it appears, so far as I can make it out, as clearly as could be wished that the Spaniards were shot at with arrows. That the bows shooting those arrows could not very well have been the latter-day Marquesan bows that v. d. Steinen hardly thinks worth the name of toy bows (p. 51: "kaum den Namen eines Kinderbogens verdient"), I, too, consider clear enough. On the basis of Quiro's description I therefore think it probable that *the Marquesans made use of the bow as a weapon of war, even if not universally, at all events down to the turn of the sixteenth century into the seventeenth.* Between the years 1595 and 1774, when, so far as is known, the Marquesas Islands were not visited by any white men, this war bow must have degenerated into an unimportant toy and quite ceased from playing the part of a weapon. What the original Marquesan war bow was like we do not know. The bow as a Marquesan weapon of war may possible also have been an "intermediate cultural property" in the same way as, in the opinion of Krämer (pp. 171, 172), periodically was the war bow in *Tonga* and *Samoa.* That the bow was used in war in Tonga is a matter beyond any doubt whatever. Whether it also was used for that purpose in Samoa is less certain. This is denied by Hiroa without even discussing the point (Samoan Material Culture., pp. 613, 676), unless his stating, on p. 542, that bow and arrow, "abandoned in warfare, survived in fowling" may be inferred as meaning that the Samoans possibly used the bow as a war weapon in times gone by. His definite denial on p. 676 of the bow ever having existed as a war weapon in Samoa I however consider altogether too final. On this question I am more inclined to agree with Krämer's opinion.

After this digression let us return to the Tahitian *Fana* bow. This object is mainly used by *arii* at religious bow-shooting festivals, known as *Te'ara'a.* The arrows, *eahe,* were of bamboo and provided with smooth and blunt points made of *Casuarina* wood. The three arrows in our collection, numbered 7. 8. and 9., *1799. 2. 21,* b, c and d, agree in appearance perfectly with the arrows described in the account given by Ellis, Polynesian researches, 1831., in which are found both the bamboo shafts, the wooden points, the smearing of the lower section with gum from the bread-fruit tree, and an absence of feathering. The arrows were kept in a quiver, *peeha,* an example of which is included in the collection (numbered 6, 1799. 2. 21. a). Like the bows, these quivers were frequently most elegantly polished, and provided with decorative windings consisting of string made from coco-nut fibre or plaited human hair, and in addition fitted with a lid of wood or coco-nut shell. The quiver found in our collection appears, as, besides, also the bow, to belong to more simple kind, seeing that it is devoid of decorative windings. The latter may, however, in the course of time possibly have worn off and got lost. Handy (History and Culture etc., p. 67) classes the bow and the arrow as elements belonging to the *arii* culture in the Society Islands.

5. Length overall, 152.5 cm. Diameter at the widest part, 3.3 cm.
6. Length, 85 cm.; diameter, 3 cm.
7. Length overall, 82 cm. Thickness of shaft, ca. 8 mm. Length of point (the uncovered portion), 3.5 cm.
8. Length overall, 80 cm. Thickness of shaft, ca. 7 mm. Length of point (the uncovered portion), 2 cm.
9. Length overall, 80 cm. Thickness of shaft, ca. 6 mm. Length of point (the uncovered portion), 2 cm.

No. 10 of the Sparrman collection (1799. 2. 51.) consists of a rather large adz of "basalt" from Tahiti, fitted with a handle of ordinary Tahitian shape. The adz-head itself, which is of dark, fairly well polished and uninjured basalt, and of typical Tahitian shape, is with "three-ply braid sennit" attached to the handle. The original lashing is almost completely intact (Plate V.). The handle is naturally in only one piece, and consists of shaft, foot provided with shoulder, and toe and heel. The toe is very short. The heel, on the other hand, is as usual rather long, and provided with an upward-projecting jut. The whole handle is made of wood that was originally light-coloured but which along the whole length of the shaft has become dark and shiny from lengthy usage.

Underneath the winding, in two places, viz. at the *shoulder* and farthest forward at the *toe,* pieces of light, hard fish-skin have been wedged in between it and the wood. This rarely found technical peculiarity does not occur in the other Tahitian adz (No. 1848. 1. 10) contained in the museum collections, nor have I been able to discover any exact counterpart of it either in the literature or in other South Sea axes belonging to the Museum. A very close correspondence is however found in Hiroa's description of the axes from *Tongareva.* Inter alia he writes (p. 186): "Scales of *the maratea fish* were used to cover the front of the adze butt, the lowest scale projecting down over about half of the front of the projecting blade". Nothing of that kind occurs, as we see, on the Tahitian adz we are here concerned with. He goes on to say (p. 187): "The use of fish scales is unique, but I do not know whether or not the technique dates back to pre-European times". If we may judge by the adz collected by Sparrman, it is possible that this technique was pre-European in Tahiti.

10. Length of the stone adz, 18.5 cm.; width of edge, 6.5 cm. Total length of handle, ca. 47 cm. Length of foot (from the scooped-out portion for the blade, rearwards), 9 cm.; its height (at the hollowed part), ca. 6 cm.; (at the heel) ca. 3.7 cm. Length of the rearward-pointing heel, 5 cm., its width at the bottom (in side-view of adz), ca. 2.3 cm.

Of *poi-pounders* from the Society Islands we have an example in our collection. According to Silverthorne, the Tahitian poi-pounders may be divided into six main types. In addition, certain intermediate types are discernible. All these types are in the Society Islands as well as in the Austral Islands and in Rapa known by the name of *penu,* according to statements made by Bouge. Hiroa (The Material Culture etc., p. 246) gives us, from Aitutaki, the same name, and also *reru.* In the Marquesas these stone pounders were known as *kea tuki,* and in Mangareva only as *tuki* (Bouge, p. 3). The most widespread Polynesian word for "pounder" and "pound" is, according to Tregear, *tu'i.* Food pounders of stone or coral exist, or formerly existed, so far as I have been able to ascertain, on the following Polynesian islands or groups of islands, viz.: The Society Islands, Austral Islands, Hawaii, Marquesas, Hervey Islands (Cook Islands, Mangaia), Mangareva, and Rapa, and in Micronesia on certain islands in the Carolines and the Marianas. Thus the stone pounder is an element belonging to the central, eastern and northern Polynesian culture. Like the majority of South Sea stone-work products it does not either belong to the neo-Polynesian culture, but is one of the cultural objects that the proto-Polynesians created after their arrival in their island domains. The poi-pounder is not of the *arii* culture, but of that of the *manahune.*

The poi-pounder under discussion, *numbered 11,* 1799. 2. 7., falls under Silverthorne's "Type 3, variation", which he describes as follows:

"These pounders have larger bases than is usual for type 3. The ears are considerably higher also. In one (C 4881), there are no grooves on the ears or median ridge, which is only sligthly indicated. But in the Wanganui Museum in New Zealand there is a pounder of this kind which has grooved ears and a grooved median ridge. This pounder is similar to the "Captain Cook" pounder in the British Museum. In C 4881, ears are 30 mm higher than body of bar. Viewed from the side the ears are rectangular, and the transverse bar section is triangular. Both upper and lower surfaces of bar are horizontal. Edges of base and ears are considerably worn down in the Bishop Museum specimen."

Judging by the above description, the Sparrman pounder is as regards appearance practically identical with the specimen preserved in the Wanganui Museum and the "Captain Cook pounder" in the British Museum. This in particular applies to the appearance of the handle and the ears. For, as will be apparent from the illustration, both the ears and the median ridge are provided with grooves. Viewed from the side the upper parts of the ears are rounded. C 4881 in the Bishop Museum has, in contradistinction, ears that seen from the side are rectangular. Of this latter type are also Bouge's *penu* from Papeari, Plate I A, and an exceedingly well preserved specimen in the State Ethnographical Museum of Sweden, numbered 1848. 1. 9., depicted in Söderström (Some notes on Poi etc., fig. 1, bottom row, to the right).

11. Total height, 17.5 cm. Length of cross-pieces on handle, 5.5 cm. Length of

handle, 8.2 cm. Diameter at the base, 11 cm. Diameter immediately below the handle, 4.4 cm.

The Tahitian section of the Sparrman collection also includes a *tupai* (*No. 12*, *1799. 2. 11*), a mallet for the manufacture of tapa cloth. In the process of that manufacture the bast of the Broussonetia tree was beaten out on 2 wooden underlay, often of considerable length, called *titia*. The tapa mallet is made of a reddish-yellow kind of wood with dark stripes, very firm and hard of structure (*Casuarina equisetifolia*). Of the four sides of the mallet, which is rectangular in section, two adjoining ones are quite smooth, and the other two provided with very narrow grooves, called *ao*. In shape, the mallet most nearly corresponds to No. 5993 in Plate 6, in Brigham (Ka Hana Kapa). (From this work of Brigham's I have also borrowed the Tahitian words that are here given in connection with the manufacture of tapa.) — In Sparrman's catalogue this object is described as follows: "A grooved implement for the preparation of cloth from Morus Papyrifera. Otaheite." The mallet conforms in point of shape to other Tahitian tapa mallets, thus giving no reason for doubting Sparrman's statement as to locality.

12. Length overall, 32.7 cm.; length of the grooved section, ca. 20 cm.

Nos. 13 and 14 (1799. 2. 8, and R. M. 1405), consist of two low seats, or stools, supported by four legs, and by Ellis (Polynesian researches 1840—42) referred to under the Tahitian name *iri*, or *nohoraa* (Vol. II, p. 189 ff.). According to Handy, stools of this type, as well as certain other objects provided with legs, are "clearly attributable to the *arii* . . ." On a stool of this kind not everyone was allowed to seat himself, as it was exclusively reserved for the master of the household or some honourned visitor. Teuira Henry (p. 190) relates how the royal heir in Raiatea was seated on a stool while being invested with his high office. In the great procession that proceeded from Taputapuatea to *te-papa-o-ruea* (the-rock-of-investment) he was "accompanied by the chiefs of the realm, four of whom bore him upon their shoulders on a large wooden couch . . .", which Henry describes as follows: "The couch was hewn out of solid miro wood. It had four legs, a raised piece forming a pillow, and carvings at each end. It was called the *parahiraa* or *nohoraa aru* (royal seat or throne)." — The Tahitian stools were not always made of wood. Máximo Rodríguez (p. 53) describes a rare specimen made of black stone, probably basalt. This stool was of a shape similar to that of the wooden stools, and was consequently provided with four legs and a concave seat.

13. Height of legs, ca. 10.5 cm. Length of seat, not counting the sag, 57 cm. Width of seat in the middle, 21 cm.; at one end (the intact one), 23 cm. Average thickness of seat in the middle, 1 cm.
14. Length, apart from the downward curve, 57.5 cm. Width at the middle, 21.7 cm. Height of centre above ground, 19 cm.

According to Handy, the stool forms part of the *arii* culture in Tahiti, but it also existed in other parts of Polynesia. Beside the Society Islands, it occurred in the Cook Islands (Hiroa, p. 43), (one specimenis preserved in the Ethnographical Museum of Sweden, numbered V. 31. 3) and in Manihiki and Rakahanga (Hiroa, p. 82). Brigham (The Ancient Hawaiian House, p. 193, fig. 178) depicts a stool from Anaa in the Paumotu archipelago, and another from Hawaii, called *noho*. Judging by photographs, this stool shows great resemblance to a "three-legged poi board" from Tubuai, which is illustrated in Aitken (Pl. VI, D). The "coconut grating stools" mentioned by the same author (p. 39), with four legs, appear to have been very much like the ordinary Polynesian stools. The same may be said of the Marquesan household utensil of similar character, illustrated by Brigham (The Ancient Hawaiian House, fig. 178). Apart from the projecting neck to which a coral implement is attached, it is an ordinary stool with a hollowed seat. One of the "coconut graters" from the Marquesas that are depicted by Handy (fig. 10, f) also to some extent resembles a stool in its shape. The stool does not, so far as I know, appear to have existed in Fiji, Samoa (Hiroa, Samoan Material Culture, p. 666), or in New Zealand. In the Tongas, on the other hand, it seems that stools were being used. Cook (Cook's third voyage, Vol. I, p. 393) in his description of the furnishings of the Tongan houses says that there was "perhaps a large stool for the chief or Master of the family to set upon". Gifford on p. 126 gives the following account of a Tongan chief: "When sitting among his inferiors, a pile of mats (*lango-lango*) is provided to raise him above the common level". In Samoa the chiefs, according to Krämer (Vol. II, p. 241), sat on a "Mattenthron", and among the "Insignia and Titles of Vaiari" Handy (History and Culture etc., p. 18) gives the pride of place to "Papa-o-te-toa-o-te-tumu (The-stratum-of-the-basic-foundation): royal seat". — Generally speaking, in Polynesia — as in most other places in the world — the stool or the raised seat appears an exclusive privilege of chiefs and other persons of position or birth as a visible mark of their authority and high social position. Within the regions we are here concerned with it probably — together with the staff, the flywhisk, and other insignia of rank — wherever it occurs forms part of the ruling *arii*, or *Tangaroa* culture, and may perhaps in earlier times have had a wider distribution than it is now possible of ascertaining.

Smaller in size, but of the same shape as stool No. 1 are the two pillows, *Nos. 15 and 16,* RM. 377., and RM. 1404. According to Ellis (Polynesian researches, 1840—42., Vol. I, p. 188), these "pillows" were called *tuaurua*. Cook (Captain Cook's Journal etc., p. 96) relates that the Tahitians also used wooden blocks or bundles of cloth to rest their heads on. Sparrman in his book (II: I, p. 119) says as regards the sleeping places of the Tahitians: "for sleeping places, or beds, neatly woven and cool mats are spread on the ground, and the pillow also possesses a quality suitable to the climate and for providing coolness, in as much as it consists of a small wooden stool . . . ". As in stool No. 13, in both these headrests, or pillows, the legs at the shorter ends are, lowest down, two and two joined together with cross-bars. This is a feature which infallibly refers them to Tahiti.

15. Length, 33.5 cm. Width, 12 cm. Height of legs, ca. 11.5 cm.
16. Length, 24.5 cm. Width, 12 cm. Height of legs, ca. 8.5 cm.

In a letter to Professor Lindblom, dated 1. 12. 1936, Dr. Buck (Te Rangi Hiroa) writes that the ear ornament, *No. 17*, 1799. 2. 14., "if of glass may belong anywhere, but if the white beads are of shell and the black beads of coconut shell, then the ornament is from Tonga". In a letter to the present author, dated 23. 9. 1937, he repeats that, so far as he knows, ornamental objects made of "shell and coconut beads" in Polynesia have only occured in Tonga. As it happens, however, this ear ornament, numbered 15, is made of glass beads and would therefore be referable to almost any Polynesian island group, including that of Tahiti. Both Cook and Fourneaux brought with them glass beads for bartering purposes, among other places to Tahiti, as is confirmed by Máximo Rodríguez (p. 7). The latter refers to these beads by the Spanish-American name *chaquiras,* which by his translator, Corney (p. 249) are described as "very small glass beads, or imitation seedpearls, formerly a common article of barter used by the Spaniards in their traffic with Peruvian natives". From what has just been adduced, and on the basis of Sparrman's own notes, according to which this object originates from Tahiti, I feel justification in referring ear ornament No. 17 to the Tahiti group.

17. Length of strings, 6.5 cm.

Of other Tahitian ornaments our collection contains two "ear pendants of small Helios and Abrus from Otaha", Nos. 18 and 19, 1799. 2. 22. Otaha stands for Tahaa, a small island next to Raiatea. According to Dr. Buck (Te Rangi Hiroa), (in a letter dated 23. 9. 1937) these two small ear pendants are unquestionably referable to Tahiti, i. e. to the Tahiti group.

18. Diameter of the black ball, ca. 12 mm. Length of the twin strings, ca. 8 cm.
19. Length of twin strings, ca. 8 cm., as in No. 18.

No. 20 in the Sparrman collection is a tattoing comb of a wellknown Tahitian type, unfortunately rather badly preserved. This type has, among others, been described by Ellis (1831, I), and is also found in Edge-Partington and Heape, ser. I, p. 32, Nos. 14—19. No. 17, the spade-like "hammer" with which the tattoing comb was struck into the skin is not represented in the Sparrman collection. A specimen of this type is however preserved in another collection in the Museum. — The Sparrman tattooing comb is of bone, and attached to a wooden handle. Its teeth are practically all broken off, and have disappeared. Its catalogue number is 1799. 2. 24.

20. Length of comb exclusive of teeth, 25 mm. At the widest part, 13 mm. Length of handle, 14.4 cm.

The last but one of the Tahitian objects consists of a hair ornament for dancing girls, made of black human hair made into a number of plaits consisting of three-ply string, and 500 cm. long. Hair-trusses of this kind were piled on the head into a conical structure, and decorated on the outside with the white flowers of *Morinda citrifolia* (No. 21, 1799. 2. 15.).

21. Length of hair bunch, 500 cm.

"A breast shield, with feathers and sharks' teeth, from Otaheite" is how Sparrman in his inventory describes No. 22. 1799. 2. 16., a horseshoe-shaped breast ornament, or breast shield. As is apparent from the description accompanying the illustration, breast shields of this type were made up from a framework of thin slivers of wood, to which were attached rows of sharks' teeth and feathers, with tufts of white human hair fixed on along the outer edge. Handy (History and Culture etc., p. 22 and pl. VI) gives us the name, *taumi*. From him we learn that breast ornaments of this kind were worn by chiefs, but beyond this gives no particulars of these, or similar, ornaments, either from Tahiti or elsewhere. A "gorget" of this type is depicted by Brigham (Hawaiian Feather Work., pl. II), but neither does this author mention anything about similar ornaments from any other locality. Skinner, however, supposes a certain connection between these Tahitian ornaments and other crescent- or horseshoe-shaped breast ornaments from Easter Island, Fiji, and the Solomon Islands (Skinner, Maori Amulets etc., Note on Pearl-Shell Pendants etc.). With these crescent-shaped types may probably, in my opinion, be classed the Marquesan breast ornaments of wood that are referred to in the beginning of this chapter. The Tahitian feather-ornamented *taumi* type is on the other hand characteristic of the Tahiti group, and does not occur elsewhere. The corresponding ornaments from Easter Island, Fiji, the Marquesas and the Solomon Islands are made of wood or shell.

As regards the cultural home of the *taumi* ornament it may be mentioned that Handy attributes it to the *arii* (History and Culture etc., pp. 53 and 67). Its military significance is pointed out by Ellis (Polynesian researches 1840—42., pp. 500, 521): "On the breast they wore a handsome military gorget, ingeniously wrought with mother-of-pearl shells, feathers, dog's hair, white and coloured". As will be apparent from this description, the breast ornaments that were observed by Ellis differed in some degree from those collected by Sparrman. The mother-of-pearl ornaments that Ellis describes are to be found on the Tahitian breast-plate that is depicted by Brigham (Hawaiian Feather Work., pl. II).

22. Distance between inner edges of ends, 18 cm.

The Tonga Islands.

From the Society Islands we now turn to the *Tonga Islands,* the material culture of which is represented by several examples in the Sparrman collection. If we begin

3

with the weapons, we first meet with two clubs, *Nos. 23 and 24,* 1799.2.37. and 38.

The former of these weapons belongs to the type of clubs that Churchill called "coconut-stalk type (Lapalapa)" (p. 56 ff), and which he gives the following area of distribution: Samoa, Tonga, Rotuma, Fiji. All these islands, or groups of islands, lie, as we know, comparatively close together, and have been intercommunicating since remote ages. *Lapalapa* is, according to Churchill, the Samoan name for this type of club. In Tonga it was known as *abaabai,* and this must have been the name applied to the club we are dealing with, seeing that it undoubtedly derives from Tonga. Cook's expedition, as we know, never sighted the Samoan group. The shape of the club will be apparent from the illustration, from which it will also be seen that it is only decorated on the head, above the two ribs. The handle is altogether devoid of ornamentation. It has no pierced flange for its suspension. The decoration is a variant of Churchill's "coconut-leaf motive", which he analyzes on page 132 of his work. This motive is observable in clubs from both Fiji, Tonga and Samoa. In its typical form it is found in a Fijian club of "billet type" in Churchill (P 2491, pl. X: 14), and Hiroa shows it, e. g., in a paddle-club (Samoan Material Culture., fig. 312: a), which he — probably correctly — surmises to derive from Tonga, and in a paddle-club from Fiji (fig. 313: d). The Sparrman paddle-club (No. 21) carries similar decoration of typical form. This "coconut-leaf motive" appears in its purely typical form, as here seen, to be mainly Fijian and Tongan, possibly only Tongan. In Samoa it seams, so far as I am able to gather from Churchill's and Hiroa's pictures and descriptions, to occur in a degenerate form, mostly as so-called "herring-bone".

Just as the coconut-leaf motive can hardly be said to be of Samoan origin, neither does the coconut-stalk type appear being so. It is true that Churchill applies to it a Samoan name, *lapalapa,* and classes it, along with the paddle type, with the pronouncedly Polynesian types (p. 159). Felix Speiser, (Über Keulenformen in Melanesien.) too, in his detailed account of the different club types of Melanesia, counts the last-mentioned of these two types, i. e. the paddle type, among club types that are pronouncedly Polynesian. To these, in his opinion, belong the three club types that are referred to by him as "Kolben-, Fächer-, und Ruderkeule" (pp. 103, 104). Hiroa, like Churchill, expresses no definite opinion as to the locality where this type may have originated, but he, too, is evidently inclined to class it as Samoan, if we may judge by his referring to the great antiquity of this type (p. 56) and to the use of "the actual coconut leaf midrib in the sport of club fighting" (p. 589). This sport is also, among others, referred to by Churchill (p. 56), while the two Samoan verbs, *saulu* and *tuulu,* given by him for the trimming of the handle so that it could be used as a club, in conjunction with the reference, in a Samoan legend, to a leaf midrib of this type having been used as a striking weapon, would seem to lend further colour to the theory that this club type at some early time originated in Samoa. If that was the case, it follows that it must subsequently have been transmitted to Tonga, and there have given rise to the type of club of which Sparrman collected a specimen.

To the above theory the author, for his part, is however not prepared to subscribe. The great age of the Sparrman club, the fact of its undoubted Tonga origin, its rather plain, "aboriginal" form, together with the circumstance that it is decorated with the coconut-leaf motive — which in its most typical form occurs in Tonga — all combine to making me believe — at any rate for the present — that this type of club originally came into being in the Tonga archipelago.

23. Total length, 84.5 cm. Length of head, 26.5 cm. The rhomboidal head measures 6.6 by 12 cm. in section.

Also from Tonga is the club of *paddle type* that in our collection is *numbered 24,* (1799. 2. 38.). As just has been mentioned, and as also is apparent from the illustration, it is decorated with the coconut-leaf motive in its typical form. But, as the figure shows, this has only been done in the small space between the two top cross ribs, which are placed close together, and the lower cross rib. Strangely enough, the weapon is otherwise devoid of any decoration of any kind. The only suggestion in that direction found on it consists of some kind of shallow and narrow scratches, or engravings, which in different patterns cover the whole of the handle, from the bottom cross rib and downwards. It would seem as if it had been intended to cover the entire handle with decorations in these patterns, and that for that purpose there had been outlined rough designs which had not been subsequently carried out. They are so slight that they at first escaped observation. The head of the club has no ornamentation of any kind, nor any suggestion of such.

This club is most nearly allied to Hiroa's Samoan Type 2, "Paddle clubs with short cross ribs", of which he says that in Samoa it "was being displaced". These words may possibly be taken to mean that he is of opinion that in some earlier period this type was more strongly represented in Samoa than later researches have been able to establish. All Churchill's paddle clubs of this type are, on the other hand, from Tonga. Neither has Krämer a single one from Samoa. Of Edge-Partingtons' clubs of this type, which are reproduced by Hiroa, and of which there are three that might be considered in this connection (I, fig. 312, a, b, c, p. 599), 312, c, is the one that bears the closest resemblance to Sparrman's Tonga club. Especially the head, with its "median longitudinal edges", and its maximum width occurring fairly close to its point, is practically speaking identical in shape with that of our Tongan paddle club. This club is by Hiroa described as follows: "Paddle club (type 2) with long oblanceolate, uncarved blade and short rib without shoulder. Suspensory lug present; length, 47 inches". The pierced lug for its suspension is the feature in the construction of this club that most of all makes one inclined to refer it to Samoa, like Hiroa does. By reason of its form in other respects so closely corresponding to that of

Sparrman's Tonga club, I nevertheless wonder if in this case an interrogation mark ought not to be placed after "Samoa". Its resemblance to the Sparrman club is altogether too striking. In this case a great deal of significance also attaches to the correspondence between the ornaments on Sparrman's coconut-leaf club and those on his paddle club, as well as to the circumstance that Sparrman's paddle club possibly was meant to be decorated all over the handle. Rich ornamentation characterizes, as we know, most clubs with a Tongan origin.

That the paddle club in our collection was brought home from Tonga is beyond all doubt, and this also refers to the object just described. Our guarantee for this are, it must be admitted, the historical and geographical circumstances in which Anders Sparrman made his voyage. In view of these incontestable data, and considering that the majority of the clubs of similar type, met with in the literature and in museums, seem to have been collected in Tonga, it appears to me that we are bound to class also this type of paddle club among the club types that, within the region Tonga-Samoa, have originally come from Tonga.— In stating this opinion I only refer to paddle clubs of the type that Hiroa calls Type 2. His Type 3 has subsequently evolved from the Tongan Type 2, and become the type generally favoured by the Samoans. This Type 3 is besides well represented among the Samoan clubs in our collection here at Stockholm.

24. Length overall, 116.7 cm. Length of head, 41.4 cm.; maximum width, 13.8 cm.; thickness, ca. 1.8 cm., and width at the bottom, 7.2 cm. Length of the ornamented central section, 8 cm.

Lastly it may be mentioned that, according to a text published in Gifford, in Tonga the paddle club was known by the name of *moungalaulau* (Tongan Society., p. 207).

No. 25 of the Sparrman collection (1799. 2. 21) is a *Fana,* i. e. a bow, from Tonga.

25. Total length of the bow-stave, 210 cm., and diameter at its thickest part, 2.2 cm.

Gifford writes (Tongan Society, p. 207) that in Tonga the natives used the bow in war. In this, he especially goes by the authority of Mariner, from whose well-known accounts of a Tonga of the past it appears that the bow, at any rate at times, constituted a weapon of war in that island group. This, as we know, is rather alien to Polynesian conditions in general, and for that reason the Tonga bow has already been the subject of a great deal of scientific writings, so that I need not devote much time to it here. The authors that have dealt with the Tonga bow with some measure of detail, are, apart from explorers such as Cook, Forster, Dumont D'Urville, and Mariner, chiefly v. Luschan, Frobenius, and Friederici.

Sparrman's Tonga bow is of the ordinary type, long and slender, and made of rather light-coloured, polished mangrove wood. The bowstring is missing. The bow is

210 cm. long, and its greatest diameter (in the centre) is 2.2 cm. At one end the bow-stave is thickened, and here provided with two notches for the fastening of the string. The other end terminates in a rather short, narrow tenon, "growing out" from an incision squarely carved in the wood. This sheer incision occurs on the same side of the stave as the groove that runs the whole length of one side of the bow. Thus the tenon just referred to, constitutes on the opposite side of the bow a direct continuation of this latter side. The groove is fairly deep and wide, and occurs in most bows from Tonga and Fiji, from which latter island group the Tongans moreover have borrowed their bow, at all events the war bow to which Mariner now and again refers.

The groove that I have just described, which runs the whole length of one side of the bow, has, besides, been the subject of numerous discussions in the specific literature, frequently bound up with the question as to whether the Tonga bow was by the Tongans used in war or not. That the groove is a feature directly adopted from Fiji hardly seems to have been called in question, and this I think may safely be placed beyond doubt. Opinions have, on the other hand, been somewhat at variance as to whether the groove occurred on the belly or the back of the bow, and, in that connection, whether the bow we are concerned with was a reflex bow or not. The Sparrman bow, as is apparent from the illustration, has, in spite of the absence of its string, a noticeable bend, and the groove — in which the single accompanying arrow is placed — occurs, in the way the bow now is bent, along its back, or outer side.

According to v. Luschan (p. 225), and Forster (I, p. 438) (from whom, as Frobenius (p. 231) tells us, v. Luschan has, by the way, borrowed his description of the Tonga bow), this weapon was 6 ft. long and about as thick as a little finger, and, when not in use — presumably when unstringed — only very slightly bent. In this condition the bow had the groove along its outer side, i. e. on its convex part, just like the Sparrman bow here illustrated. In this groove was occasionally placed the arrow, which likewise was roughly 6 ft. long. In drawing the bow (again according to Forster and v. Luschan), this was not done by increasing its existent bend — where the groove was on the convex side — but by flexing it in the opposite direction, i. e. exactly like a reflex bow. As to this, on p. 235 of his work just referred to, Frobenius states as his opinion that the Tonga bow was probably *not* a reflex bow, and that Forster's description can be explained in another way. Frobenius, it may be noted, thinks it probable that the stave of the "normal" Tonga bow, like the stave of its prototype, the Fiji bow, in its original condition was always straight, but often happened to get "over"-bent ("ver"bogen), that is to say, from damp or other causes more or less bent the wrong way. This properly straight bow-stave would accordingly have had the above-mentioned groove along its inner, or "belly", side. That it was placed on the inner side, Frobenius considers proved from the position of the thickened part that served for fastening the string always being found on the same side as the groove, in consequence of which the latter must have had its place along the belly of the bow-stave. According to the same author (p. 235), he has in fact himself seen bows from Tonga, in which the string was fastened in this particular manner. Frobenius' supposition is in some degree borne out by another Tonga bow in the possession of the State Ethnographical Museum of Sweden, that one, too, unfortunately lacking its string. For this bow cannot be said to bend in any particular direction, but, so far as I am able to judge, must originally have been straight. By now it has almost become slightly S-shaped. Its catalogue number is 1850. 1. 14.

The present writer is for his part inclined to agree with Frobenius in that the Tonga bow had its groove along the belly, and that it was no reflex bow. The two Tongan bows preserved at our Museum, viz. the Sparrman bow and the one just referred to, both, from what I can see, had the string fastened on the same side as the groove. That in the Tonga islands the bow, at any rate at times, was used in war does not, as already mentioned in this chapter, appear in any doubt whatever. Neither can it well be doubted that it was bows of this particular type that Mariner saw used as war weapons.

In this connection it would have been especially interesting if Sparrman had given us a detailed description of his bow and its usage. This he has, however, not done. In the account of his travels he only writes: "They showed me by signs how their grooved bow was drawn so as to shoot an arrow some 30 to 40 paces at an enemy, whereupon they, from opposite sides, charged towards each other with spears and clubs" (II: 2, pp. 18, 19). In his original inventory he only mentions that this particular specimen of bow came from Tongatabu: "Bow, of considerable length, cannelured, with its arrow, likewise several ‚alnar' long; from New Amsterdam". From this description it would appear that the war bow in the Tonga islands — as I have already pointed out in the case of the Marquesas and Samoa — only was an intermediate cultural property. It also appears as if, strangely enough, only a single arrow was used. The latter is confirmed by Cook himself from his second voyage: "On the inside of the bow is a groove, in which is put the arrow, from which it should seem that they use but one" (A voyage towards the South Pole etc., Vol. I, p. 221). In this description it is, as we see, also confirmed that the Tonga bow had the above discussed groove on the inside. The natives of the Tonga islands having, as it would seem, only used one arrow for each bow constitutes in my opinion evidence that in these parts the bow was only intermittently used as a war weapon. That this, at times, must have been the case is therefore placed beyond doubt, and cannot well be disputed.

It may also, perhaps, not be too far-fetched to suppose that by that time the bow no longer retained its character of war weapon, but that the discharging of a single arrow in battle constituted a mainly ritual act of war, reminiscent of the former great importance of the bow and arrow as weapons of war.

In 1930 M. Ed. Ahnne, President of "la Société des Études Océaniennes", in a short article appearing in the journal of that society, maintained that among the Polynesians the bow at no time whatever was used as a weapon of war (pp. 39—46). To this conclusion he appears to have come chiefly through studying literature on Tahiti, where the bow, so far as I have been able to ascertain, has — it is true — never been used in war. As will be apparent from what has already been said in this chapter, it is, however, not safe to apply this view to Polynesia generally. Already in the same year Ahnne was contradicted by P. Ildefonse Alazard (p. 115), whose authority was certain statements in P. Laval's memoirs from Mangareva. As regards Tonga it is true that Captain Cook, from his third voyage (Vol. II, p. 75), writes that in those islands bows and arrows were never used against an enemy. This does not, however, alter the opinion I have just advanced that in Tonga the bow was at times (Mariner, Sparrman) used in war, similarly to what is known to have occurred in other parts of Polynesia.

Bringing herewith to a close descriptions of the Polynesian bows that are contained in the Sparrman collection I however wish, so as to obviate any possible misunderstanding, strongly to emphasize that I fully agree with those who hold that the bow never for any considerable lengths of time was a regular and universal war weapon in Polynesia. Only for certain periods, and in certain island groups, was it used in war. Frequently this occurred under Melanesian influence.

The arrow belonging to the Tongan bow, by Giglioli called "Halumata", after Labillardière, is by Friederici (p. 56) referred to under two different names. The first of these, *nahau,* he describes as a war arrow, the second, *kaho,* as a hunting arrow. These two names he has taken from "Dict. Toga", p. 118, (P. A. C., Missionaires Maristes etc.), and after Mariner. Not being an expert linguist, the present writer is not in a position to determine whether the two names cited by Friederici are in any way connected with the "Halumata" of Labillardière and Giglioli. Whether or no, we are no doubt justified in accepting them. The fact of *nahau* being interpreted as war arrow lends fairly good support to my theory, expressed in the foregoing, that the bow was once a weapon of war in the Tonga Islands. *Kaho* is in all probability the most correct name for the type of arrows that Cook, Forster and Sparrman collected on the second expedition, and therefore also applies to the specimen we are here concerned with.

The Sparrman arrow is long and slender, made of some kind of reed, and provided with a wooden point. Its present length is 185 cm. and its maximum thickness (just behind the point) is 1 cm. in diameter. The point, which extends beyond the shaft by 18.5 cm. and is made from *toa* (Casuarina equisetifolia), is barbless and has a blunt nose. At the end into which the point is inserted into the shaft, the latter is wound with coco-fibre in several thicknesses. The nock end of the shaft is splintered and frayed, but it is however unlikely that the arrow ever was any longer than it is now. In view of the nature of its point, it is — as already mentioned — hardly likely that this arrow was used in war, but that it was a hunting arrow, a *kaho.* As to whether this also implies that bows of the type to which this arrow belongs were exclusively used for hunting purposes, is a question I am unable to decide, but as I only know one name for bow, viz. *fana,* or *pana,* but two somewhat dissimilar ones for arrow, viz. *nahau* and *kaho,* I am disinclined to believe that a special type of bow was in Tonga used for war purposes. Neither is anything of the kind, so far as I know, stated by any author whatever. Friederici classes both the *nahau* and the *kaho* arrow under the heading "Der *Gasa*-Pfeil", from which it may be inferred that both arrows were probably very much alike. Presumably they were distinguished, one from the other, only by the appearance of the point. In any case it is however apparent, according to Friederici, that they belonged to the same linguistic group. — Our arrow is *numbered 26,* and catalogued under 1799. 2. 40.

26. Present total length, 185 cm. Length of head (protruding), 18.5 cm. Diameter just below the head, 1 cm.

No 27, catalogue number 1799. 2. 10, is a short tool of chisel character, being a sharp-edged chisel of black, polished basalt, socketed in a handle of rather light-coloured wood, somewhat roughly fashioned. (The stone tool itself has a length of 4.7 cm. and a width of 3.9 cm., with a maximum thickness of 0.8 cm. The handle is 10.8 cm. long, and its diameter ca. 3.2 cm.) The chisel is fastened to the handle with cords made from coco-fibre.

No. 28 of our collection is a houshold appliance of a type that, under the heading of Tonga, is depicted in Edge-Partington and Heape, Ist ser., No. 88.8, and there described as "Food hook with disk to prevent rats from reaching the food". Also Dr. Buck (in letter of September 23, 1937) considers this objects to be of Tongan origin. The rat-baffler with its appendant food hook consists, as seen from the illustration, of a circular wooden disk pierced in the centre by a hole through which passes a doubled cord of three-ply braid sennit. At its upper end this cord is tied into a loop, by which the whole contrivance is suspended, while to its lower end is fastened the four-pronged hook for hanging up the food, on which the wooden disk rests. The bottom — and visible — side of the disk is polished to a fairly high degree of smoothness, and its yellowish surface painted with divers figures in dark blue (see the plate). — (The disk, which is not quite circular, is ca. 32 cm, in diameter. Its thickness (at the centre) is ca. 1.5 cm. The hook, terminating below in two points, measures an over-all length of 16.5 cm.)

Catalogue No. 1799. 2. 19, which is *numbered 29* in the list I have drawn up, is a Tongan fishing implement of a well-known Polynesian type, the full name of which in this case ought to be a "large composite trolling hook". The hook is of the ordinary Tongan type that Beasley depicts and describes on pp. 20—21 in his book. Accordingly, it has a shank of "close-grained whalebone", with a piece of dark-coloured mother-of-pearl let in at the back. The hook itself is barbed, and consists of two pieces of turtle shell tied together. These are set side by side, and at the same time lashed to the shank by means of two bands of plaited *oloná* fibre (*Touchardia latifolia*), affixed in two places in the manner seen in the figure. At the bottom is attached a tassel of the same material. The two components of the double hook are in addition held together by strings of the same material threaded through two holes close to the barb, as well as by the stout, and very carefully and skilfully plaited, fishing-line, by means of which this spoon-bait is drawn through the water. The line is fixed directly on to the hook, and runs along the shank, at the top end of which it is secured with strings passed through a perforation made in the whalebone. The mother-of-pearl plate let in at the back is made fast with strings passed through two pairs of holes, one at the bottom and another at the top end of the shank. These twin holes do not pierce right through the whalebone, but are only bored to a shallow depth into it, so as to form a short, shaped U-tunnel. On the top-side of the whalebone, somebody — probably Sparrman himself — has written a few words, now only partly decipherable. It says: "Krok från Otahite uti imitation af . . .", meaning in English: "Fish-hook from Tahiti, in imitation of . . ." Presumably the full text was ". . . uti imitation af en fisk", i. e. ". . . in imitation of a fish". As will be noted, Sparrman — if he it was — has ascribed the hook to Tahiti, instead of Tonga. Here Sparrman, as in one or two instances relating to objects above referred to in this chapter, has — as we see — confused local names. That this was at all possible, is no doubt due to the fact that he did not write down these notes of his until his return home, when evidently his memory played him false on occasions. The Museum possesses another hook of the same type from Tonga, collected by the Vanadis Expedition, catalogued as 30. 29. 2. (No. 1799. 2. 19 has a shank of whalebone, 15.5 cm. long, and at the bottom 1.7 cm. wide and 0.9 thick. Its top end terminates in a tapering point. Its maximum dimensions (just below this point) are: width, 2.7 cm., thickness (mother-of-pearl disk included), 1.8 cm. The inlet mother-of-pearl disk is 15 cm. long and ca. 0.5 cm. thick. The base of the twin hook has a length of 4 cm.) — This type of hook is one of the few fish-hooks found in The Pacific, single or compound, that are provided with an inner, true barb. The barb of the Tonga hook has not come into being in imitation of the barbs of European metal fish-hooks, but already existed on the pre-European Tongan hook. The Tongan name of this hook was *ba* (Beasley, p. 20). In his above-mentioned book, Beasley has collated and described all known forms of fish-hooks from The Pacific, and thereby left a magnificent material for anyone wishing to work it up. The present paper not being the proper place for a work of that kind, I only wish to emphasize what has already been pointed out, (Hiroa, Ethnology of Tongareva.) viz. that Beasley, like Gudger, is in error when he describes the whole of the hook fixed to the shank as a barb, seeing that it is in actual fact only the slight projection found next to the point of the hook — designed for preventing the fish from getting away — that should be referred to as barb.

Another fact bearing on the subject of fish-hooks from the Pacific (even though involving quite a different region), and one which might perhaps also be of interest to Americanists, is the circumstance — not maybe generally taken note of — that on the west coast of South America, in the neighbourhood of Santiago, one day in the last century was recovered a fish-hook which in all probability originates from one of the Gilbert islands. It is now preserved in "El Museo Nacional" at Santiago de Chile, and its existence is drawn attention to by Erland Nordenskiöld once or twice in Part III of his "Comparative Ethnographical Studies": "The Ethnography of South America seen from Mojos in Bolivia", viz. in vague terms on p. 89, in "Table to Map 10" (p. 99), and in "Map 10", where it is depicted under the number of 238. According to the text supplied to the map, it was archaeologically recovered at Paine in the vicinity of Santiago, and made of "stone and bone", as cited from Medina, fig. 120. It is accordingly found under that number in Medina, in addition to being referred to on p. 187, in his work "Los Aboríjines de Chile". Medina writes verbatim as follows: "El Museo Nacional posee un anzuelo cuya punta es de hueso i el cuerpo de piedra, encontrado en Paine i que reproducimos de tamaño natural en nuestra figura 120. En la estremidad de la piedra se ha taladrado un pequeño agujero para recibir el hilo, i la espina de hueso está asegurada al resto del instrumento por medio de otro hilo. Creemos que este aparato ha sido hecho en tiempos mui posteriores a la invasion española, pero al mismo tiempo que no puede dudarse que sea debido a la inventiva indíjena. Los peruanos introdujeron en Chile el uso del metal para la fábrica de estos utensilios. El numero 123 representa un anzuelo de cobre encontrado en Copiapó, modelo i material que se jeneralizó bastante en el país, pues Gonzales de Nájera asevera en una nota de su obra i en términos jenerales 'que los indios pescaban con anzuelos de cobre sin lengüeta'."

The hook preserved in Museo Nacional at Santiago is thus, according to Medina, made of *stone and bone,* and would therefore perfectly agree with those trolling hooks which, even in later times, have been acquired from the Gilbert group and originate from Ocean Island (Banaba, Bonapé). In my opinion it is nothing more nor less than a composite Banaba hook. That this composite hook, as supposed by Medina, was made in times long after the Spaniards' arrival in Chile, may quite well be according to fact, just as it may also be true that in times of long ago it was brought across from Bonapé to Chile by Spaniards. The theory that this particular hook is an Indian invention, or even was manufactured by Indians, I am by no means prepared to subscribe to. The latter question, as to whether or not the Santiago hook originates from Banaba, I am however unable to determine with absolute certainty, as it depends on whether the hook preserved at Santiago has a shank made of the same material as that of which the Banaba hooks are usually made, or if the material is of some other kind. For these hooks, as Burrows (p. 103) writes, have "rod-like shanks of translucent stalagmite". The Stockholm museum possesses several Banaba hooks of this type (Nos. 24. 6. 268—70, 375, 448, Gilbert- and Ellice-Islands), collected by Professor S. Bock. Beasley illustrates and describes a number of Banaba hooks with exactly similar shafts. In particular the shank of the hook No. III, Plate CXLII, in Beasley shows close correspondence with the shaft of the Santiago hook. Some of these composite hooks are provided with copper points, while others have points made of bone. The Santiago hook depicted by Medina and Nordenskiöld not only, so far as can be judged from the illustrations, bears identical resemblance to the Banaba hooks preserved at Stockholm, but is also, as stated by Medina, made of stone and bone, exactly like the Banaba hooks. In addition, in the Santiago hook the bone point itself is fastened to the shank by means of string, as is also the case with the Banaba hooks. What would settle this question is whether the shank of the Santiago hook really consists of translucent stalagmite or if it is made of some other kind of rock, or even, if Medina's statement be incorrect, of some other material. The author has himself written to the Museum at Santiago de Chile, for the purpose of learning of what material the hook we are concerned with is made, but regrets never having received any reply. In view of what has been adduced above regarding the appearance of the hook, the statement cited from Medina's book, etc., I have little doubt that the point is of bone and the shank of translucent stalagmite, in consequence of which the object in question may be considered as originating from Banaba Island.

George Forster says of the paddles that were observed in Tonga: "Their paddles had short broad blades, something like those of Taheitee, but more neatly wrought, and of better wood" (p. 425). Further on he writes that the paddles had "short rhomboidal blades" (p. 461). Cook (Cook, A voyage towards the South Pole etc., Vol. I, p. 216) describes how the Tongans usually propelled their outrigger canoes with paddles, "the blades of which are short, and broadest in the middle". Hornell (p. 273), in his book on the canoes of Polynesia, Fiji and Micronesia, among technical terms from the Tonga group gives the word *fohe* for paddle, and *fohe uli* for "steering paddle". He has, however, been unable to depict any paddle from this island group, owing to not having had at his disposal any that was of indisputably ancient type. Fortunately enough there is in the Sparrman collection a paddle from Tonga, the genuineness of which is beyond all doubt. Judging by the photograph reproduced by Hornell in his book (p. 254, fig. 180 a), in which a modern Tongan paddle is seen leaning against a *bobao* canoe, the modern Tongan paddle appears exactly like its precursor from the days of Cook and Sparrman. So far as I can judge from the photograph in Hornell (taken in 1925), the modern paddle likewise presents Forster's "short rhomboidal broad blade", as well as the circular-sectioned, and at the bottom squarely truncated, handle which in Sparrman's specimen extends as a thickening for some distance into the blade. — *No. 30.* 1799. 2. 36, which is of brown, polished wood, with a round-sectioned handle and provided with an oval blade terminating in a blunted point, thus exactly corresponds to the Tongan paddle photographed in 1925. From the photograph it even appears that here also occurs the small point, slighty projecting above the level of the handle, in which the blade terminates on the side of the blade that faces the handle. The Sparrman paddle is of the *fohe* type, and not a steering paddle. Its over-all length is 115.5 cm. In its widest part the blade measures 28 cm., its length from point to "point" (see above) is 45.5 cm., and its thickness in the middle, ca. 0.6 cm. in section, the handle has a maximum diameter of 3.2 cm.

The pan-pipe, 1799. 2. 35, *No. 31* of the collection, consists of ten narrow pieces of bamboo of different lengths, in two places tied together with coco-fibre. In the upper, and level, row, i. e. from which the pipe is blown, all the reeds are doubly hollowed. Of these hollows, one is always sligthly deeper than the other, so that each reed on the same side as the others has a sharp edge, against which the air expelled by the blower is broken up in order to set, by series of pulses, into vibration the air contained within the reed. For achieving this result, the reeds are in their lower ends stopped by nodes. One of the outer reeds is broken off, but by comparison with the Tongan pan-pipe illustrated in Edge-Partington (46, No. 88: 5) a fairly exact determination of its original length should be possible. This because this picture and the Sparrman pipe, when compared with one another, were found almost exactly to correspond as regards the correlative lengths of their tubes. The length of the broken-off reed appears to have been practically the same as that of the fourth reed away from it. The lengths of the reeds in the thus reconstructed pan-pipe, counted from the broken one and measured from the more deeply hollowed edges to the inner side of the nodes, are, in centimetres as follows: 13.7, 15.7, 18, 15.6, 13.7, 16, 18.2, 16.2, 14.3, 12.6. The gross diameter of each tube is ca. 0.8 cm.

From the fact that the correlative lengths of the tubes in both the pan-pipes here dealt with apparently are identical, the author thinks it probable that the Tongan pan-pipes, or at all events part of them, were constructed according to a certain definite system. If that be the case, they would consequently also have been designed to produce certain definite notes.

Unfortunately the ethnographical expert on musical instruments, Dr. E. Emsheimer, that on my account endeavoured to determine the pitches obtainable on the Sparrman pan-pipe was unable to arrive at any definite result. I am however inclined to believe that this might have been possible to a skilled professional musician with the help of first-class instruments. However that might be, it may be supposed that a comparison between different pan-pipes of this type would be of some value. Nothing of the kind has, so far as I am aware, hitherto ever been done.

The wooden pillow (*No. 32*) collected by our explorer from the Tonga group, or, to be more exact, from Tongatabu, catalogued as RM 367, was originally not presented to the Swedish Academy of Science but to one of Sparrman's personal friends, viz, the famous Swedish botanist and Japan traveller Carl Peter Thunberg. Sufficient evidence of this is provided by the inscription, written in ink, found on the under side of the pillow, which runs: "Pall nyttjad till hufvud-gärd på Vänskapsöarne, hemförd ock skänkt till Vännen C. P. Thunberg af dess confrater i

C.-B. Spei, Sparrman". Translated into English: "Low stool used as a head-rest in Tonga, collected and presented to my friend C. P. Thunberg by his brother botanist in C.-B. Spei, Sparrman". (C.-B. Spei = Caput Bone Spei. In 1772 Sparrman and Thunberg met in Capetown, which declares this expression.) This pillow is of the usual Tonga type, with a narrow, concave "seat" and out-curving legs with slightly broadened, round and flattened feet. Its length from end to end, not counting the sag, is 48 cm. Its width is in the middle 4.5 cm., and across the ends 7 cm. The circular and flattened feet are ca. 2.5 cm. in diameter.

The two combs, *Nos. 33* (1799. 2. 12) and *34* (1799. 2. 13), both originate — according to Sparrman's own data and Dr. Buck's statement in his letter of September 23, 1937 — from Tonga. Both are made of coconut leaflet midribs, held together at the top by a slab of plaited single coconut husk fibres. The first-mentioned — and longer — of these combs is composed of 21 teeth, about 13 cm. long. The fibres by which they are joined together, are in part of a dark colour (brown-black) and in part have been left undyed, their natural colour being light brown. The second comb is somewhat shorter, and the connecting fibres present a clearer and more definite pattern than in the case of the former, where it is hard to distinguish. No. 33 shows besides a more variegated design, divided into three different fields. The colours are similar to those found in the preceding comb.

The garment, *No. 35* (1799. 2. 23), constitutes, according to Sparrman, some sort of rain-covering from the Tonga group, more particularly from Tongatabu. The author cannot draw to mind having seen any garment of this type depicted or described in the literature. In one of his letters (Sept. 23. 1937) Dr. Buck however mentions that the garment in question with certainty must have its origin in this island, or in some other island of the same group. This garment is very wide across, but vertically very short, apparently designed for throwing over the shoulders. It is woven in double warp, and the material consists of pandanus fibres (?) worked up and dyed brown. On the outer side are woven-in seven rows of triangles, with seventeen or eighteen triangles in each row, and at the bottom the main piece is finished off in a similar, triangle-shaped pattern. This type of garment was known as *Egiai* (Gioglioli, p. 31, after Cook).

Nos. 36 and 37, with the common catalogue number 1799. 2. 29, are two necklaces of practically the same kind but of different lengths. Both come from the Tonga group, and consist of "beads" of Abrus precatorius, threaded on narrow, twin strings. At wide and regular intervals two abrus beads occur side by side, each threaded on its own string, while the rest of the beads occur singly, as seen in the picture. This arrangement applies to both necklaces. Lengths: No. 3 , 426 cm.; No. 37, 256 cm.

No. 38 (1799. 2. 30) is another necklace from the Tonga group, but of a type entierly different from the two foregoing. It is 130 cm. long and made up of small,

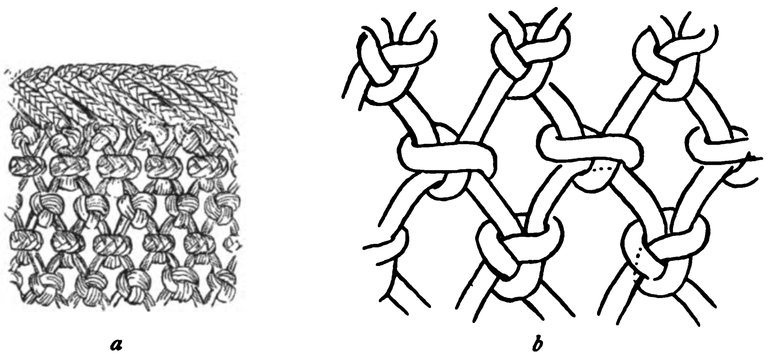


Fig. 1 *a*. A somewhat extended and enlarged drawing of the interior tying in the Tonga basket, No. 41. — 1 *b*. Strongly schematized enlargement of the technique in fig. *a*.

irregular fragments of coco-nut shell and sea-shell (species unknown), some few larger shells, teeth, bones of birds, and pieces of coral, etc.

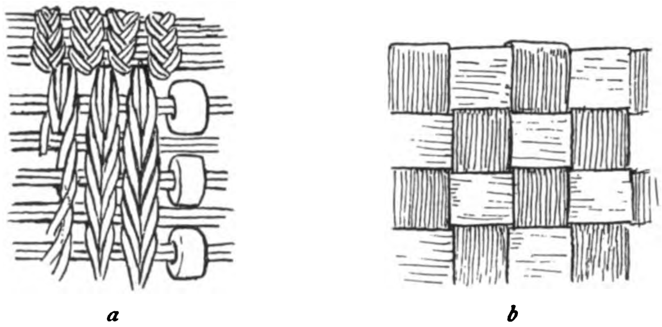
The fourth necklace from Tonga, *No. 39* (1799. 2. 31), in its upper part consists of a fairly thick two-ply string in two parts, tied together at the top, i. e. at the back of the neck. The bottom part of the necklace, which is somewhat longer than the upper part, consists of six narrow strings, also of coconut fibre (two-ply string), on which oblong "beads" of parrot bone, somewhat transparent and of a faint light-blue colour, are threaded. The total length of the necklace is ca. 66 cm.

No. 40 (1799. 2. 32) consists of a bracelet, also from the Tonga group, or to be more exact, from Tongabatu. The ornament in question is a circular, ground plate of *Conus virgo,* with a diameter of six centimetres, a fraction of a broken fish-hook of tortoise-shell, beads of coconut shell and marine shell, five small shells, a dolphin tooth and three shells, all threaded on a two-parted length of coconut-fibre string. On one side of the Conus disk, beside the museum catalogue-number affixed long after Sparrman's time, is seen not only his name but also in a semicircle in the margin, written in ink, both Sparrman's name and the origin of the bracelet, "Nova Amsterdamia". This, as we know, was the name given by Tasman to the island of Tongatabu. Any reason for doubting that the object in question in fact originates from this island cannot well be preferred.

The last two objects here included from the Tonga group, *Nos. 41* (1799. 2. 33) and *42* (1799. 2. 34), are two baskets of very different size.

41. Length at the top, ca. 39 cm. Height at the middle, about 36 cm.
42. Length at the top, ca. 24.5 cm. Maximum height, ca. 19 cm.

Both of them are, as noted down by Sparrman himself, from Tonga proper, and in his letter of Sept. 23, 1937, cited above, Dr. Buck also refers them to that island. As will be seen from the illustration, No. 41 is the larger of the two. It consists, so to speak, of two sections, an inner and an outer basket, partly woven together. The inner section, which naturally is not visible in the picture, is woven in a special sort of tying technique, and the outer one in a more plain tying technique in two colours. The material consists of single coconut husk fibres and the colours, as can be seen



a b

Fig. 2 *a*. Enlarged drawing of the exterior "weaving" in the Tonga baskets Nos. 41 and 42. — 2 *b*. Interior plating in Tonga basket No. 42.

from the figure, are set off in diversiform triangles. The tying and the weaving techniques are illustrated in fig. 1, *a* and *b*, and in fig. 2, *a*. On the "warp" strings in the outer basket, along the edges of the colour fields, are threaded small shell beads and occasional beads of coconut shell. The colours referred to in the foregoing are light brown and (in the dark-coloured triangles) dark brown.

The satchel, *No. 42,* is considerably larger that the foregoing and, like that, also made in two sections, one placed within the other. The outer, and visible, section resembles the former and is executed in similar colours. There is only the difference that in this case the "warp" strings run, as might be said, horizontally, while in the former they ran vertically, and that the shell beads here threaded on these strings not only edge the colour fields but also form vertical stripes within some of the latter. These are, as will be seen, the dark-brown ones. In the object under review the inner section is of a type entirely differing from the foregoing. It consists of a plain basket, or satchel, woven of one-centimetre broad pandanus fibres in double warp (see fig. 2, *b*), sewn on to the outer basket along the edges.

New Zealand.

From *New Zealand,* the first island visited by Cook's second expedition — and on which, besides, landings were made on three separate occasions during that voyage — Sparrman, according to the museum catalogue brought back with him seven different objects, viz. those which I have here numbered as 43—49. In his travel account, on the other hand, eleven objects from New Zealand are enumerated as having been presented to the Academy of Science. Among these 11 objects, 6 of those described below are found, viz. all except No. 43, the *pouwhenua*. The latter, it is true, is referred to in the travel account, but neither there nor in his original inventory does he mention anything about having collected any such object, or having presented it to the Academy of Science. His mention of "a sort of long clubs" (II: 2, p. 196) I consider as probably referring to weapons of this kind. For that reason I have thought it proper to include *No. 43,* and all the more so as it is not altogether improbable that this powhenua was actually collected by Sparrman. This theory is further strengthened by my having been unable to discover any other explorer at whose door it might be laid. No harm will however come of its inclusion here. Those five objects which in the travel account are listed as having been presented to the Academy of Science, but cannot now be found, are thus the following: "ear-pendants . . . of greenstone, . . . a small, curved nose-flute of calabash, . . .", and fibre of Phormium tenax. Further, 2 fish-hooks "of a bent, dry twig, with point and barb, which was stated to consist of human or canine bone, attached" (II: 1, pp. 84, 91). In the original inventory are contained, as already mentioned, all the New Zealand objects included in the publication just referred to, with the exception of the pouwhenua, which also there is absent. This account, besides, also deals with the greenstone ear-pendant, the calabash flute, and the two fish-hooks of wood and bone. But there is in addition mentioned an object, in Swedish described by Sparrman as "En klädedrägt ifrån Cannibalerne i Nya Zeland", or in translation: "A piece of clothing from the cannibals of New Zealand." This piece of garment has not been found to be included in the Museum's later catalogue but among its collections. To the calabash flute Sparrman himself has in his own inventory appended a mark of interrogation, a thing which, presumably, even other people might be inclined to do.

No. 43, 1799. 2. 6, is a wooden weapon, in shape much resembling a so-called *taiaha,* and generally known under the name of *pouwhenua.* (The *taiaha* was a frequently occurring and very highly appreciated weapon and emblem of dignity among the more highly ranked warriors and chiefs of ancient New Zealand). While in the *taiaha* the end away from the blade was provided with a projecting tongue bearing carved ornamentation, the *pouwhenua,* as shown in the picture, instead of a tongue had a long and tapering point. On both types are however found carved ornaments of the kind from which the tongue of the *taiaha* extends, consisting of one or two human faces stylized out of all resemblance. The *pouwhenua* was not so highly renowned a weapon as the *taiaha.* Both these types of weapon are described and illustrated in a number of specimens by Augustus Hamilton in his book "The art workmanship of the Maori race in New Zealand" (Part III, 1898). Our *pouwhenua* is thus decorated in a somewhat similar manner as the *taiaha* for about one-third down the handle, counting from its tapering end or point. About one-third of the point itself is also decorated with typical Maori carvings, as will be apparent from the illustration. The remaining portion below the ornamentation above referred to, as well as the rest of the point, is devoid of ornamentation of any sort, and consequently entirely smooth. Judging by the termination of the carvings found nearest the point, it appears as if these were unfinished. It is even possible that all this part of the ornamentation is of a somewhat later date than the rest. — The overall length of this weapon is 152 cm. The overall length of the point is 44 cm., while its maximum diameter, which also is that of the weapon as a whole, is 3.5 cm. The blade measures (just on) 11 cm. across its widest part.

1799. 2. 5 is, as will be seen from *No. 44* on the list, a ***mere onewa,*** a short war club of polished stone, i. e. black rock of basalt type. Another type of ***mere*** was ***mere pounamu,*** of the highly valued greenstone. In addition the Maori possessed ***mere*** that were made from jawbone of the sperm-whale. This last-mentioned type of ***mere*** was generally known as *patu-paraoa*. *Patu* was, besides, the generic name for all kinds of short war clubs. In an interesting article in the Journal of the Polynesian Society, Skinner has maintained that the ***patu*** once spread far outside New Zealand. Of particular interest is his classing of the Trobriand clubs in this category (p. 190).

The ***mere onewa*** of the Sparrman collection is made of black basalt and beautifully polished. It is the shape that is usual for weapons of this type, namely an oval handle which without any appreciable shoulder evenly continues into a very short club, somewhat broader and gradually flattening, at the distal end of which the oval shape is turned into a sharp edge. The point where the handle passes into the club proper, if I may express it that way, is only marked by two small and barely noticeable shoulders, placed on the two narrower sides of the oval weapon, ca. 9.5 cm. from the proximal end of the handle. The top of the handle is pierced by a hole, through which passes the thick cord of *Phormium tenax* that the original owner of the weapon wore wound round his thumb or wrist when using it, or by means of which he carried it fastened to his belt. This kind of cord was known as ***tau*** (Hamilton, Part III, p. 184). Immediately above the perforation the handle terminates in a number of swellings which in the usual way encircle the thickened end, and crown the whole. At the perforation the handle is 2.6 cm. wide and 2.3 cm. thick. The club measures 7.9 cm. across its widest part, and its total length is 29.5 cm.

Among the few objects from New Zealand there is also an *adz,* made of greenstone and fitted with a wooden handle. Its catalogue number is 1799. 2. 4., its number in my own list, *45*. The adz itself is, as mentioned, of greenstone. It has a sharpened edge, only slightly rounded in shape. The stone has besides been polished both on the upper and the under side as well as on the edges. The under side is, practically speaking, flat, while the upper side is slightly rounded towards the edges. The upper, or rear, end of the blade is unpolished, and presents an unevenly broken off edge. The material is, besides, unevenly coloured, and is also in part stratified in thin plates, by reason of which it has slightly splintered here and there. The measurements of the stone are: overall length, 13.8 cm., maximum width, 5.5 cm., ditto thickness, ca. 1.3 cm.

The handle, to which the adz head is fixed in practically the same manner as seen in the adz depicted on p. 579 in Best (Vol. II.), is of a very plain character. Very little work has been expended on it, and the material consist of some yellowish, rather hard kind of wood. The handle proper is curving, and full of knots. The foot is clumsily fashioned, and, like the handle as a whole, roughly shaped. In contradistinction to certain other Polynesian adzes, e. g. the Tahitian ones, the adz is fixed to the toe, not to the heel. The same system also applies, e. g., to the Hawaiian, as well as certain Micronesian, adzes. As near as possible to its extreme point, the toe is provided with a groove, about 1 centimetre wide, designed to prevent the binding by which the adz head is fixed to the handle from slipping. This binding consists of an unevenly applied layer of "twisted flax lashings". There is also for this purpose a simple knot tied round the handle itself. The binding on the adz depicted on p. 579 by Best is somewhat differently contrived, and appears to consist of broad, three-ply braided sennits of flax. The measurements of the handle are: length of the foot, 13.5 cm., maximum width (at the toe), 4 cm., and thickness (also at the toe), 2 cm. The diameter of the handle proper varies between 2 and 2.5 cm. — Seeing that the cutting-edged stone consists of nephrite, i. e. greenstone, it may be supposed that this type of adz was known as *toki pounamu, toki* being the word for adz, generally speaking, and *pounamu* that for greenstone. Sparrman himself calls it a "Patåpatå" (II: 2, p. 193).

The New Zealand flax, *Phormium tenax* — in the foregoing referred to in various connections — was by the ancient Maoris not least made use of for the manufacture of garments of many kinds. One ancient garment of an apparently fairly plain sort is preserved in the Sparrman collection, *numbered 46,* 7199. 2. 2. 46. Width, ca. 123 cm. Length, ca. 151 cm.

The various kinds of garments worn by the ancient Maoris, and their methods of "weaving" them, have in detail been described in particular by Hamilton (Part IV, 1899), and more recently in an excellent way by Te Rangi Hiroa (Dr. P. H. Buck) in several issues of the Journal of the Pol. Soc. during the years 1924 and 1925 (Vol. XXXIII, No. 1 — Vol. XXXV, No. 2). Those which for our present purpose are especially important are Vol. XXXIII, No. 4 and Vol. XXXIV, No. 1.

Sparrman's specimen is of a type which the author, for his part, has never seen depicted in the literature, or in any other collection. It is no doubt some sort of garment, as is also stated by Sparrman himself (I: 1, p. 84, and also in his original inventory), and designed for wearing over the shoulders and round the hips and legs. Its width is ca. 123 cm., and its length ca. 151 cm. It is of a fairly light, goldbrown colour, and I think it hardly probable that the material of this mantle was ever dyed. If, however, this was the case, it must have been done by means of the reddish-brown dye that the Maoris knew how to use.

If judged purely by the make, it might be some sort of *huaki,* i. e. "a plain cloak with double *taniko* borders". (Where nothing is expressly said to the contrary, or apparent from the context, all technical terms and native expressions are here taken from Dr. Buck's articles in the J. P. S.). Strangely enough, it is however precisely those *taniko* borders that are not here found in any form. Instead, the garment has its two longer sides trimmed with two pairs of "two-ply twisted", single narrow borders of dark reddish-brown flax, i. e. corresponding to the type of single borders that, according to the Maoris' own statement, preceded the *taniko* borders. No ornamentation of any kind is found at the top or the bottom portions of the garment, with the only exception of a few thin and ragged strips of skin or leather attached to one or two of the edges, (probably the bottom portion) to which I shall recur below. In all other respects the general impression of the garment is however, as already mentioned, that of some sort of *huaki*. In superficial appearance it very closely resembles, so far as I can see, that which is depicted in a plate found in Vol. XXXIV, No. 1. I refer to Plate 30: d, facing p. 65. In the manufacture of Sparrman's piece of Maori clothing there has mainly been used "spaced two-pair interlocking weft" (see Vol. XXXIV, No. 1, Pl. 30 d, and p. 66, as well as fig. 21), alternating with a few instances of "spaced single-pair twining" (see p. 61 ff., and fig. 19) here and there interpolated so as to shape the garment better to the shoulders and hips. The "warps" number seven per centimetre. According to a table compiled by Buck (Vol. XXXIII. No. 4: p. 310) of "Thickness of Warps in different Garments", it is in fact this very "Huaki Cloak" (Pl. 23) that has exactly seven "warps to 1 cm." In all but the *taniko* borders, which, as we see, may be supposed never to have existed, the Sparrman garment — in my opinion — must practically be classed as a *"huaki cloak"* without taniko borders. In his travel account Sparrman states that there occurred garments trimmed with dogskin, and others not trimmed with dogskin. The specimen collected by him was, as he tells us, not trimmed with dogskin, neither was it specially ornamented in any way whatever. It thus appears to have been a rather plain sort of garment. He makes no mention at all of any trimmings that could be supposed to have been *taniko* borders, nor of any other ornaments of any kind whatever. From this it may be inferred that he never observed clothing of any other type, neither "Tag cloak", "Pompom cloak" or other better-class apparel. Seeing that Sparrman mentions that the piece of clothing that he collected was not ornamented in any particular way, the bits of skin that are found attached to the bottom portion the garment, such as the latter appears in its present state, cannot fail to attract one's attention. No doubt they need to be explained in some way or other. Before entering upon that question I will however, following Dr. Buck's explanatory descriptions, endeavour to give a brief account of the method employed by the Maori in the "weaving" of their flax, *Phormium tenax*. To anyone unacquainted with this, the foregoing and following terms would in many cases be difficult to understand.

The following, necessarily rather short, description of the Maori method of preparing and "weaving" the native flax ought by rights to include a detailed account of their various methods of preparing and working up the material obtained from the leaf of *Phormium tenax*. For obvious reasons space does not, however, allow of this, and therefore I must in the main content myself with referring the reader to Hiroa's articles. Here I have to confine myself to mentioning that the Maoris practised two methods, or processes, of preparing for use the fibres contained in the *Phormium* leaves. One of these processes, the *haro* or *tika* process, was one of rough scraping,

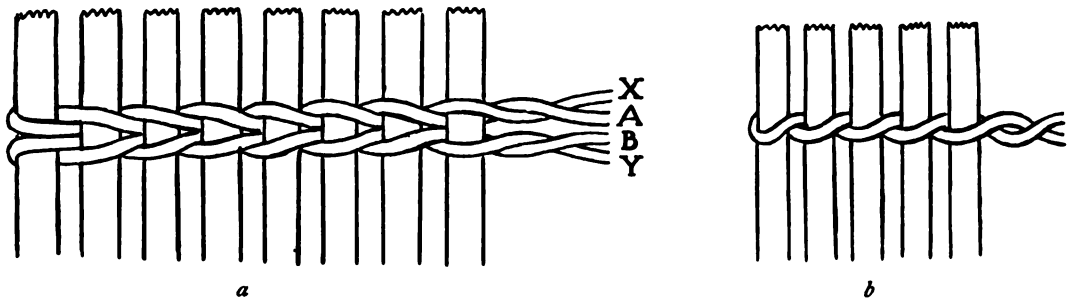


Fig. 3 *a* and *b*. Drawings after Hiroa, illustrating two-pair interlocking weft and single-pair twining.

while the other, known as *takiri,* a more elaborate process in which it was possible to tear off or pull away such leaves as contained the requisite fibres. The latter could then be washed, scraped, dried or rubbed, according to the nature of the material, or the use for which they were designed. After this preparation the fibres were subsequently made up into what Hiroa calls "wefts and warps" by being once or several times twisted against the right thigh of the operator with the palm of his right hand. Thereupon the warp was ready for setting up.

Not having a "spindle" for inserting the weft, the method consisted in setting up the wefts, one by one, horizontally placed between two laths (weaving sticks, *turuturu),* whereupon the warps were successively threaded in between the two, or four, strands of the extended wefts. That is to say, first was set up, horizontally, a double or fourfold weft fastened at one end — the left — and then between these, warp after warp was threeded to the desired number, i. e. according to the width of the garment that was to be woven. After that, the first of these wefts was stretched, and fastened for good, between the pair of *turuturu.* Occasionally the weaver would instead retain the whole thing in her hand, and defer setting it up until the first "weft" was completed. This process naturally consisted in carrying the single-pair or two-pair (i. e. fourfold) parts of the weft yarn alternately above and below the different warp yarns while the latter were successively introduced, or else, in the case of the two-pair weft yarn, these two pairs were simultaneously passed both over and under the warp, while changing places at each warp. In other words, the rear pair was passed forward over the next warp while the other pair was passed behind it, and then had its two parts separated in order to allow the first pair to be threated in between them and then under the next warp, over which the second pair was passed. Thus it was always the hindmost pair that had its parts divided so as to enfold the leading one.

It was by this method — the "two-pair interlocking weft", as it has been called by Hiroa (o.c. p. 66) — *that the garment collected by Sparrman was made.* Those few interpolated wefts which are mentioned above are of the first-mentioned kind with double weft yarn only. In order to make both methods easier to understand, they are here sketched after Hiroa, fig. 3, *a* and *b.*

Naturally, not only were there different methods by which the warp and weft yarns were joined up, but also different ways of manipulating the warp at either of its terminals, that is to say at top or bottom as the work was proceeding. According to Hiroa (o.c. p. 311 ff.), work could be started in either of two ways, which he calls "thrum commencement" and "selvedge commencement", respectively. Here, as elsewhere, it is necessary to keep in mind that the Maori woman weaver did not possess even the simplest kind of loom; that the textile work of the Maori consequently cannot properly be referred to as weaving, but rather as plaiting, or braiding; that the warp was set up vertically instead of horizontally; that the weft was horizontal, and frequently only consisting of very few yarns; that the warp yarns were intertwinned with the weft yarns by hand, and so on, as has already been described and illustrated. The initial weft yarn, i. e. the one stretched between the two laths, which, like the rest of the (during the "weaving") horizontal yarns, is by Hiroa, as we have seen, referred to as "weft", from the commencement of the "weaving" operation (as of course also all through it), enclosed the "warp" in the manner described. Above this first weft yarn, the row of warp ends might appear either in the form of "thrum commencement" or "selvedge commencement", as mentioned above.

In the case of the first-mentioned method, the procedure will, I think, be quite clear not only from the name itself but also from the following description, made after Hiroa. In the "thrum commencement" the ends of the warp yarns that were left protruding above the first weft yarn were rather short, and appeared there simply as a fringe of loose, short yarn ends. This row of yarn ends is known as "thrum". And this is the method employed in the manufacture of the garment collected by Sparrman, both at its top and bottom edge. That is to say, when displayed on a stand. When the garment was worn thrown across the shoulders, it had of course to be given a preliminary halfturn. What it looks like at the sides will be apparent from the photograph in the plate, and has already been described in this chapter (p. 52). — Of the "selvedge commencement" I do not think it necessary to give a description, as this method has no reference to the Sparrman garment. Anyone wishing for information on this and other points will find Hiroa's essays amply sufficient. The only thing I might here mention is that in the "selvedge commencement" the warp yarns were not cut off but were left with long ends which were turned downwards to the right and interlocked between the first and second weft yarns.

In a recent issue of "Mitteilungen aus dem Museum für Völkerkunde in Hamburg", Number XX, the well-known German scientist dr. Hans Nevermann has written an excellent paper on, mainly, Indonesian and Oceanic weaving and "plait-weaving" from a technical and mechanical point of view. In that connection he has quite naturally had to turn to outside regions for correlated material, especially the continent of Asia, but also the American twin continents as well as Africa and Madagascar. What in particular interests us in Nevermann's work is of course the method called by him "Flechtweberei", or weaving by plaiting, a very apt word for the kind of "weaving" that constitutes a compromise between plaiting and weaving, with which we are here concerned. Unfortunately space does not allow me anything beyond the very briefest reference to Nevermann's work. That he is not inclined to refer to the New Zealand textile work as "weaving" is only natural, and in that connection his term "Flechtweberei" is fully justified. Both Hiroa and other writers on this subject, myself included, have, as will be seen, in some way or other expressed a similar opinion. When Nevermann asserts that, in his opinion, this specific method in textile work was independently invented by the Maori, no dissent is likely to be heard. The present writer does not for his own part know of any kind of "weaving" in "Indo-Ozeanien", or elsewhere, of a similar nature, at any rate nothing that might be described, in the words of Hiroa, as "spaced two-pair interlocking weft".

While in the foregoing referring to garments of this type being decorated with dogskin, I mentioned that small pieces of skin, probably dogskin, were tacked on to the bottom edge of the garment in two or three places, mainly at its two lower corners. It is true that Sparrman, as already mentioned, states that the garment collected by him possessed no ornaments of this kind. It was in fact not trimmed with dogskin, unlike many other garments of this type that he had observed. The above notes written down by Sparrman might possibly suggest that the piece of clothing here seen in Pl. XX, originally did not form part of his collection. It is however possible that Sparrman was mistaken, perhaps because he wrote up his inventory list only after his return home, and did not complete his travel accounts until 1802 and 1818, respectively. There is moreover the possibility that the trimming of dogskin that, from all appearances, once upon a time adorned this garment had already for the most part been worn away before it came into our explorer's possession. However that may be, the present author is of opinion that the archaic technique in which the cape in question is executed, strongly favours the assumption that it forms part of the collection that was brought back by Sparrman. And on the face of it, there is tied to it a slip of paper carrying the catalogue number of the Sparrman collection.

The fifth number from New Zealand found in this collection consists, as shown by the list, of a short wooden *flute, No. 47* (1799. 2. 18.). Sparrman described it as a nose-flute, but its construction, along with information provided by Johannes C. Andersen in his lengthy article published in the J. P. S., has somewhat shaken my opinion in this respect, though Dr. Buck thinks it to be a nose-flute, too. A flute of the type here illustrated is generally known as a *koauau,* while a nose-flute is called *koauau whakatangi ihu.* It is thus seen that *koauau* is the generic name of a small flute. Flutes of this type were usually made from different kinds of wood, usually of so called "cork-wood", *whau* (Entelea arborescens), but very often also of bone, especially human bone. The flute with which we are here concerned has three holes, and is quite open ot both ends. The thickness of its walls varies between 2 and 4 mm., and its length is 13.6 cm. All three holes have evidently been burnt through the walls of the flute. The holes are fairly evenly spaced between themselves, while at one end of the flute the outer hole is nearer the end of the instrument than the other outer hole. Also the opposite end of the flute is burnt, perhaps altogether severed from a reed which originally was longer. This longer reed, as such, has, however, never served as a flute. Flutes of this type were always short. The end of the flute nearest to the three holes has not been burnt, but appears to have been carelessly cut off by means of some sort of tool. At both ends the tube has been slightly tapered off from an otherwise somewhat larger diameter. Neither is its surface even, but is in two or three places rough and knotted. The only ornamentation that it has been thought worth while to give this simple instrument consists of pyrograved zigzag lines in its middle, and at the end from which its was presumably blown. Neither I myself nor anybody else has however succeded in getting a single note out of this flute. But this may very likely be due to the fact that flutes of this type are exceedingly difficult to play by anyone not an adept. As for the reason why I am not absolutely sure of this flute being a nose-flute, this is found in the circumstance that such an instrument must have a blow-hole very close to one of its ends. It may be mentioned that the New Zealand nose-flute was blown by means of pressing one of its ends hard against the upper lip of the flautist so that that end was tightly stopped, and the nearest blow-hole placed directly below the left nostril. The right nostril was squeezed together by the thumb of the right hand. Andersen considers (p. 246) that the *koauau* flute was not usually used as a nose-flute. And this simply because the position of the blow-holes would not generally make such a thing possible. Such flutes as were used in this way had in fact mostly two holes bored side by side close to the "terminal" hole through which the instrument was generally blown in order to make it sound. The hole at the side, i. e. hole not in line with the rest, was mostly used for being threaded with a string for the suspension of the flute. Our *koauau* is not fitted with such a lateral hole, but in this case the string is passed through the nearest of the other three holes. And this hole is in fact placed at such a distance from the end of the flute that the latter can probably not have been a nose-flute. Of this instrument Sparrman (II: 1, p. 84) writes: "or else a bit of a flute that they can only play by blowing with their nostrils", and again: "a short wooden nose-flute" (op. cit., p. 84). In his original inventory it is also described as "a small wooden flute, for the nose, from New Zealand". As Sparrman on several previous occasions has been in error in his statements I cannot feel convinced that the instrument we are here concerned with is a nose-flute. That such might be the case is, however, of course not impossible, although the arrangement of the blow-holes does not make me inclined to depart from the view I have already stated. The only way a flute of this construction could possibly have been blown by the nose would, in my opinion, have been by blowing it directly from one end, and not from a blow-hole.

The latter opinion is also held by Dr. Buck, who in this respect differs from Dr. Andersen. On the other hand it is evident that Dr. Buck's view conforms with what

Sparrman himself more than once has pointed out, both in his inventory and in his book, as I have just mentioned. With regard to this instrument, Dr. Buck, in a letter dated Sept. 23, 1937, writes that it is "a wooden Maori nose flute termed *koauau*. It was blown through the hole at the end and the three small holes were the usual number of finger stops". If Dr. Buck correctly interpreted the photograph of the flute sent him by the author, and if his above cited statement is meant to say that a flute of this type is a nose flute which was blown by one nostril pressed against one of the two rather large terminal openings of the instrument — if this is what Dr. Buck means by the passage just cited, then I must admit that I do not quite follow him, nor am I prepared to give unconditional support to his assertion. There is, however, the possibility that Dr. Buck may have misapprehended the construction of the flute, and that the above cited passage of his is thereby to be explained. That Sparrman's opinion as regards the flute appears to agree with that of Dr. Buck, is of course a strong argument against the author's assertions, but as I cannot find that Dr. Andersen even refers to flutes of the type the instrument in question in such case would represent, I shall adhere for the present to my view that Sparrman's New Zealand flute was probably no nose-flute. Having unfortunately neglected to interrogate both Dr. Buck and Dr. Andersen minutely on this question, it will, for the time being, have to remain an open one so far as I am concerned.

The distance from the end of the flute (i. e. its upper end, from which it was probably blown) to the nearest hole is 29 mm., from this to the middle hole, 27 mm., from the middle to the third hole, 23 mm., and thence to the lower end of the flute, 42 mm. Of the blow-holes, the bottom hole is the largest and the middle hole the smallest. The material is very light, and probably consists of wood from *Entelea arborescens,* as already mentioned. Its colour is slightly yellowish.

As I pointed out in the foregoing, according to Andersen *koauau* flutes were made not only of wood, but also of bone, human bone included, and frequently even from bone of the albatross. In the latter case the flutes were often very small. Of the same material many so-called toggles, *poro* (Andersen, pp. 247, 248) were (or are) manufactured. This has led to toggles not infrequently having been mistaken for flutes of the description just referred to. Such mistakes are all the more easily made by reason of broken bone flutes having occasionally been used as toggles. And this is presumably also the case with the toggle in the Sparrman collection that Sparrman himself considered to be some sort of badge of military distinction. Of this, he writes in his catalogue: "an Ordre pour le Mérite, of a slain enemy's bone, from New Zealand".

That this toggle ever was used as a mark of distinction of any kind can safely be turned down, and it has, instead, probably served its ordinary purpose, viz. that of keeping some object or other from slipping off the cord to which this toggle was fastened, and of which still a few centimetres remain. The toggle contained in the Sparrman collection may possibly even primarily have been such an object, although in that case it must originally have been longer than it now is, and provided with at least two blow-holes. As will be apparent from the illustration, one of these holes is still quite intact, while the other is broken off roughly at the middle. Hence it would have been this latter hole that had for its purpose to prevent the knot — also seen in the illustration — from slipping through. It is, however, a fact that even now the knot cannot slip through the piece of bone. However this might be, there is yet another circumstance which makes me incline to the opinion that this piece of bone originally was a bone flute. This is found in the zigzag-shaped incisions that ornament it at the end that has not been broken off. These, I may mention, are typical of bone flutes and, as we learnt from the above-described wooden *koauau,* also of wooden flutes. The bone fragment with which we are concerned is moreover ornamented with the small, narrow notches ("nicks", *tarahanga*) that, in accordance with what has been stated (Andersen, p. 248), were the only ornaments of any kind that were used in decorating this type of toggle, *poro.* If this be correct, which I have no reason whatever to doubt, there is yet another fact in confirmation of this toggle being the broken-off portion of a bone flute. And this is something which can only be established by means of a magnifying glass, namely that the "small nicks" have been added subsequently to the zigzag-shaped incisions. Apart from this, there are, as will be seen, no nicks at the brokenoff end, and neither does the intact one of the two holes look as old as the one that is broken. The former, it therefore appears, must have been bored where it now is at some later time, and did not exist "in the time of the flute." The edges of the broken hole are quite shiny and smoothed from ancient handling. — From what has just been adduced we are no doubt justified in describing *No. 48* (1799. 2. 23.) 5 cm. long and with a diameter of, maximum, 18 mm. at its thickest end, as a bone toggle, converted from a broken-off bone flute.

The last of the New Zealand exhibits in the collection is a *comb* made of whalebone, of a not very uncommon kind. Its appearance will be sufficiently clear from the illustration. Its catalogue number is 1799. 2. 1. Its overall length is 32 cm., and it measures 12.2 cm. at its widest part, while its width at the bottom (across the points of the teeth) is 8.5 cm. The teeth are 15 in number, and are mostly ca. 7 cm. long. The comb is quite smooth on both sides, but slightly curved in its longitudinal section. It is rather thin, being ca. 4 mm. in its thickest part, which occurs just above the points of the teeth.

Combs of this type are, according to Hamilton (pp. 301, 302) known as *heru,* and used as ornaments. They were usually stuck into a bun of hair, tied round with flax, at the back of the neck of the kind known as *putiki.* Frequently such *putiki* were tied up, even as many as eight of them, and arranged in a circle round the head. Giglioli, too, refers to this type of comb as *heru.*

In leaving New Zealand and passing on to a description of the last objects of the collection, those from *New Caledonia* and *Tanna Island,* we are also leaving Polynesia and entering the still living, less known and more alluring, world of *Melanesia.* Our collection unfortunately does not contain any objects from the less known parts of this group of islands, but those we have date sufficiently far back for being of interest if only on that account. The two islands of New Caledonia and Tanna, together with a few more, chiefly New Hebrides and the Banks Islands, have besides — unlike the more westerly and northwesterly parts of Melanesia — been subjected to such an amount of interest, not least as regards their material culture, that the objects contained in the Sparrman collection hardly need anything beyond a bare description in brief of their nature. It is mostly German scientists that can take to themselves the honour of having solved a good many of the problems that present themselves to the student of Melanesia. In Melanesia and Indonesia there still remain unsolved the majority of the problems confronting the ethnologist student of the Pacific, and these are mainly of a material nature, or, to be more accurate, they are often best solved by studying the migrations of the material objects and kindred questions. It is to be regretted that a good many scientists who profess being ethnographers and ethnologists, or anthropologists, almost exclusively devote themselves to attempts at unravelling sociological problems. These are naturally in themselves highly interesting, but sociology — like, e. g., history of religion — is a specific science, and the clearing up of sociological questions is never by itself alone capable of solving the tangle of cultural history problems, and of answering the questions of cultural and racial migrations, with which ethnology is chiefly concerned. Apart from this, it is quite another matter that sociology, like anthropology, archaeology, philology, history of religion, and social and political history are sciences auxiliary to each other. The most important auxiliaries to ethnology are however physical anthropology and, though not invariably, archaeology.

What by the above perhaps somewhat lengthy discussion I have meant to criticize is the fact that many modern scientists in their study of more or less unknown and unexplored regions usually devote almost the whole of their time to delving into social problems, and often entirely neglect to collect material objects or exact anthropometrical data. And yet these two last-mentioned tasks nevertheless constitute the fundamental work of the ethnologist-ethnographer, without which no questions regarding cultural and racial connections can be satisfactorily cleared up.

New Caledonia.

From *New Caledonia,* one of the islands discovered on Cook's second expedition, there are in the collection preserved three objects, viz. two war-clubs and a comb.

Regarding the war-club, *No. 50* (1799. 2. 48), Sparrman writes in his own inventory: "Särdeles Casse Tête att klyfva huvudskålen med från Caledonia", or, translated, "An imposing war-club for splitting skulls with, from Caledonia". The club in question is of a fairly uncommon type. Its origin being New Caledonia cannot however be doubted, but is proved by its offset grip and the shape of the head. It is true that the latter is double and unusually large, besides being rather sketchily formed, but in spite of this, the weapon is unhesitatingly referable to the group of root-stock clubs that, according to Leenhardt and after him F. Sarasin (p. 189), have so-called tortoise heads. In particular it seems to correspond to the club from the Tiouaka valley, depicted in Tafel 53, fig. 12, by Sarasin in his Atlas. The Sparrman club is however of a considerably more primitive type than any I have so far been able to find in the literature. Sarasin's theory that the so-called bird's-head, or Kagu-head, clubs have evolved from the tortoise-headed clubs appears to me quite credible. That development took this course is very evident from a study of his illustrations in Tafel 53 and Tafel 54. Even more explicitly is this theory expressed by Speiser, both in his treatise on Melanesian club types and in his work "Versuch einer Kultur-Analyse von Neu-Kaledonien." The first of the Sparrman clubs here described is referable to the group of New Caledonian clubs that Speiser, on page 92 of his first-mentioned treatise, has called "Hakenkeulen". His deriving this type from more or less primitive root-stocks ("Wurzelstocke") used as clubs, subsequently developed into tortoise- or bird's-head clubs, cannot be otherwise than quite correct. And his assertion that from the beginning, and with nature for a model, clubs were not made in imitation of heads of tortoises or birds, but that primitive man only by degrees came to discover such resemblances in the different club heads of root-stock type and then by stages reshaped them accordingly, is, it must be admitted, a very convincing extension of Sarasin's theory just referred to. The Sparrman club, being of primitive root-stock type, serves to confirm this theory and, besides, constitutes an intermediate type between a root-stock and a club of, e. g., the type that Sarasin illustrates in Tafel 53, fig. 12, the Tiouaka valley club. Lehmann-Nitsche advances the theory that bird's-head clubs, similar to those of New Caledonia, were from Melanesia carried to South America, and there (in Chile and Argentina) underwent a directly opposite course of development, that is to say, from clubs with a pointed bird's-head into clubs with more or less rounded head ("Sichel- bzw. Schraubenschlüsseltypus"). This theory strikes me as being very strange, at all events as regards their supposed transfer from the Pacific. His so-called "Clavas Cefalomorfas de piedra" have with all certainty no connexion whatever with Melanesian club forms. It is strange, too, that he makes no reference to Sarasin's work, with which he was supposedly acquainted when composing his article for Zeitschrift f. Ethnologie. — The dimensions of club No. 50 are as follows: Length overall, 57.5 cm. Length of the flat head, ca. 33 cm. Diameter of handle immediately below the head, 4.5 cm., at the opposite end, 3.5 cm.

No. 51 (1799. 2. 49), the second Caledonian war-club, does not, according to Sparrman's own statement, originate from New Caledonia but from Tanna, as noted in his inventory. As often before, he is however mistaken in what he has written in that list. Even in this club we find the offset, circular grip that, in association with the shape of the club head, unhesitatingly refers this weapon to New Caledonia. To return once more to Sarasin's work, it may be mentioned that the Sparrman club much resembles the one seen in Tafel 52, fig. 14. The latter club is found in the Cambridge Museum. Speiser ("Über Keulenformen in Melanesien") supposes that this club is a so-called "Pilzkeule", a type from which are derived clubs with circular heads, of the type "Eichelkeule". Speiser's "Pilzkeule", on the other hand, may, in his opinion, be a direct descendant of a "Wurzelstrunk", or "Wurzelstock", i. e. a root-stock type, so that all known types of New Caledonian clubs are derived from the same original form. This he expresses in the following words: ("Über Keulenformen"; p. 92): "So glaube ich sagen zu dürfen, dass alle Keulen Neu-Caledoniens sich vom Wurzelstocke ableiten." — The dimensions of No. 51 are: Length overall, 70 cm. Maximum diameter of handle, 4.3 cm.

As pointed out by several writers with regard to all or most of the culture elements of New Caledonia, these are undoubtedly of very great antiquity and in many cases also autochtonous of New Caledonia. In his cultural analysis of New Caledonia, as well as in his analysis of the cultures of the more central parts of New Hebrides, in both of which treatises Speiser in an excellent way has dissected out the different culture elements and culture complexes ofthese regions, the root-stock clubs are classed among elements belonging to the "primitive Nambas culture." This civilization covered not only New Caledonia but also the southern New Hebrides: Tanna, Eromanga, Futuna, Aneityum and Aniwa. Loyalty Islands are left out because certain important elements of the "primitive Nambas culture" were there absent.

To a culture, earlier than and underlying the "primitive Nambas culture" — a so-called "aboriginal culture" — also, according to Speiser ("Versuch einer Kulturanalyse der zentralen Neuen Hebriden"), belonged the combs — stave, and bamboo — that occurred throughout the above-mentioned region, besides which they were also found in all the New Hebrides-Banks Islands area. Of these objects a stave comb of pure New Caledonian type is represented in the collection (*No. 52,* 1799. 2. 47). Sparrman gives the origin of the sling, No. 53, also as New Caledonia, but as I have reason to suppose that it instead possibly comes from Tanna, I will deal with it later. The comb consists of fifteen long and narrow teeth of some hard kind of wood, at the upper end provided with a small knob, so as to prevent them from dropping through the small piece of interlaced work by which they are movably held together at the top. This interlaced work consists, so far as can be seen, mainly of yarns of European wool. Sarasin describes combs of this type on page 162 and illustrates a number of them in Tafel 45. Fig. 2 of this plate would appear to come nearest the Sparrman comb in point of resemblance. Our explorer writes of these combs that their teeth were loosely connected with each other, so that they could be "spread out or, when required, closed together for raking out or re-quartering the — no doubt numerous — indwellers in this luxuriant and tangled hair mop." This statement of his is confirmed by Sarasin, who writes: "Diese Kämme dienen vornehm-

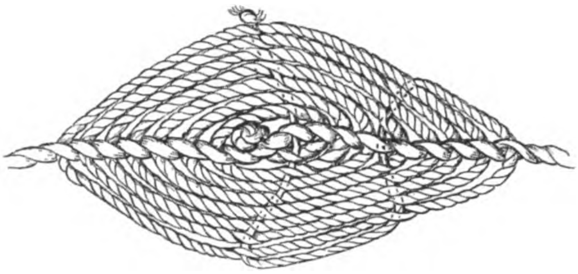


Fig. 4. Drawing showing the construction of the Tanna sling stone socket, No. 53.

lich zum Kratzen und Stochern in den Haaren und zum Lockern der dichten Spiralflocken." That they were also used as ornaments, stuck into the hair with outspread teeth, is apparent from fig. 6, Tafel 45. — The teeth, as already mentioned, number 15. Two of them are almost completely broken off. Length, ca. 27 cm., thickness, ca 2 mm.

Tanna.

Speiser refers the slings — and other objects — that are net-woven ("Netzgeflecht") to the group of elements belonging to the "primitive Nambas culture" that, although part of it, have been influenced from outside, presumably from New Guinea. In this case it therefore turns upon the presence of net-weaving. Without entering upon the question of the correctness of this theory — with which I have no occasion to quarrel, but accept — it here suffices to mention that the Sparrman stone sling is provided with a pad, or stone socket, carried out in some sort of net-weaving, and, further, that to my knowledge no sling of this description ever existed in New Caledonia. From what will be apparent below, it should more properly be classed as a culture element with a probable origin in some island in the southern section of New Hebrides, most likely Tanna. (The stone sling, as such, existed in these parts already during the "aboriginal" culture).

The sling, *No. 53* (1799. 2. 50), consists of two cords, one of which is provided with a small loop, and the other terminates without anything at all in the way of a loop, ball, tassel, or other arrangement. From its middle portion issue the two cords from the above-mentioned pad, or stone socket, in which they are interwoven. This pad is carried out in some sort of net-weaving (see adjoined figure), fig. 4, and I have been unable to find any sling with a socket of this kind, reputed to originate from New Caledonia. On page 199, Sarasin describes four slings from that island, all of them having the appearance seen in the sling depicted in fig. 1, Tafel 58. In this sling the stone socket only consists of two straps of plaited cord ("zwei geflochtenen Schnurbändern"), and thus agrees on the whole with those which Speiser (Ethnographische Materialien) depicts in Tafel 61 (figs. 1 and 2, only), and with, e. g., the Hawaii sling that is illustrated in Stokes (fig. 7, p. 47). No sling resembling that of Sparrman appears at all events to by known to Sarasin, originating from New Caledonia, and seeing that his work no doubt is the most reliable one in the field, I content myself with referring to it and to the authors cited by him. The Sparrman sling is more likely to originate from Tanna, a supposition to some extent supported by Speiser (Ethnographische Materialen, p. 233, and Tafel 61, Abb. 5), according to which slings with plaited stone sockets have existed in that island. On this point he writes: "In den südlichen Inseln ist die in der Mitte geteilte Schleuderschnur durch eine andere quer durchflochten, so dass ein ziemlich breites Lager entsteht (Taf. 61, Abb. 5)". The Tanna sling depicted by him appears to be of a plainer kind than that of Sparrman, and its socket is moreover more oblong, but this does not of course prevent that more elaborately made slings of the Sparrman type may have existed. It may besides be mentioned that a sling with plaited socket, on the whole not very unlike the Sparrman sling, and originating from Tesaka, on the east coast of Madagascar, is depicted and described by Lindblom (fig. 4, p. 23). — It therefore seems that we may safely consider that the Sparrman sling originally came from Tanna. The length of the looped cord exclusive of the loop is 75 cm., while the other cord is 82 cm. The approximate length of the socket when spread flat on a table is 11.5 cm., and its width at the middle roughly 6 cm.

In his work "Ethnographische Materialen aus den Neuen Hebriden und den Banks-Inseln", Felix Speiser on p. 20 — in his review of the spears and spear-throwers that occur in this region, or, as he in his later articles in "Zeitschrift für Ethnologie" calls them, "Lanzen", "Lanzenschlingen" — comes to the conclusion that in the islands of Santo, Fate, Eromanga and Tanna there existed "Wurflanze aus einem Stücke mit und ohne geschnitzte Widerhaken", that is to say, literally, "throwing spears in one piece, with or without carved barbs." It may in this connection be observed that when Dr. Speiser uses the word "Wurflanze", or even merely "Lanze", he *always* refers to a light spear for throwing, while by "Speer" (and "Stossspeer") he *always* means a stabbing spear. That my interpretation of the two words, "Lanze" and "Speer", is correct, is confirmed by Dr. Speiser in his letter of July 4, 1939. In reading his above-mentioned book and articles, this should therefore be kept in mind, and also as regards the description of the Tanna spear included in the Sparrman collection.

This spear bears the *number 54* (1799. 2. 44) and is, as seen from the illustration, fig. 1, plate XXIII, made in one piece with barbs directly carved out of the wood. According to Sparrman's own statement (II: 2, pp. 132—133) it comes from the island of Tanna. His giving of locality may be accepted as correct, nor is it inconsistent with the data contained in Speiser's work "Ethnographische Materialen", as shown by the citation from it given above. That in that island existed spears hurled by means of spear-throwers would follow from the fact that Tanna (p. 210) lies within his "Gebiet der Wurflanze mit Speerwerfer". According to Sparrman, the spear was thrown by means of a spear-thrower made of some vegetable material, and he also states that a specimen was included in his collection, although it has by this time unfortunately disappeared. The spear-thrower was however similar to those which occurred in New Caledonia, although not quite so painstakingly made as the latter. This statement of Sparrman's is entirely in accordance with the actual facts, such as are known to us through many other explorers. — The spear seen in the picture is 217 cm. long, and fairly slender and fragile (diameter of its thickest part, 1 cm.).

In the present connection it may be of interest to ascertain Speiser's estimation as regards the geographical distribution of the throwing spear (Speiser's "Lanze" and "Wurflanze") within the region we are here dealing with, and its reference to it culturally, and also whether the stabbing spear (Speiser's "Speer" or "Stoss-spear") occurs here, and if so in what particular place. In his essay "Versuch einer Kultur-Analyse von Neu-Kaledonien", he writes (on p. 188) that both New Caledonia and southern New Hebrides *only* possessed the throwing spear but not "der Speer", that is, the heavy stabbing spear. This might of course only have been expected in the area in question, with its fairly primitive strata of cultures. This is exactly how he puts it: "Die Lanze kommt in Neukaledonien ausschliessich vor (Sar. Ethn. 191 ff.), auch in den südlichen Neuen Hebriden finden wir *nur* die Lanze, obschon in den nördlichen Inseln der Stossspeer sehr häufig ist . . ." In his "Versuch einer Kulturanalyse der zentralen Neuen Hebriden", Speiser, on p. 149, refers the throwing spear to what he calls the "aboriginal culture". On p. 151 we read: "Die meisten haben also die Lanze und nicht den Speer, so dass der Urkultur wohl die Lanze zuzuweisen sein wird", and on p. 153 he again says that to the aboriginal culture may safely be assigned, inter alia, "Lanze (*nicht* Speer)." To the earlier, "aboriginal" culture underlying the Nambas culture, accordingly belonged the light spear, designed for throwing, while the stabbing spear must be ascribed to a higher cultural stratum, introduced by later immigrants.

Regarding the methods employed by the natives of Tanna for catching fish and birds, Sparrman writes in his book (II: 2, pp. 119—120): — "The Indians themselves do not seem to know any fishing method other than by shooting the fish at the surface of the water with trident arrows, the points of which are four inches long, on or between which the fish is caught. Small birds are shot in the same way." In his original inventory are mentioned: "2 three-pointed arrows for shooting fish or birds." Both of these are preserved and appear as *Nos. 55 and 56* (1799. 2. 45; 1799. 2. 46). Sparrman's statement that the same type of arrow could be used both in hunting and fishing is, among others, confirmed by Speiser (Ethnographische Materialien, p. 215): "Ein prinzipieller Unterschied zwischen Jagd- und Fischpfeilen lässt sich nicht machen." Of the Tanna arrows, one of which he depicts (Tafel 52, fig. 13), on p. 216 he writes as follows: "In Tanna kommen neben dreispitzigen auch zwei- und vierspitzige Fischpfeile vor (Taf. 52, Abb. 13). Bei den zweispitzigen verhindert eine Bindung über die langen Spitzen ein Spreizen derselben." Speiser

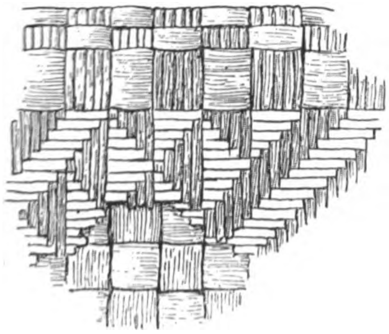


Fig. 5. Drawing showing the construction of the outer and inner sections of the Tanna basket, No. 57.

states that the shaft of the hunting arrows always consisted of "Schilfrohr", and the wooden points of "Palm- oder Baumfarnholz."

Of similar materials the Sparrman arrows presumably are made, although that of the points has not been capable of exact determination. In both the arrows the shaft consists of wood from some species of *Bambusa,* while the three points are of some rather dark, coarse-grained kind of wood. In both, the shaft is at butt and fore ends wound with coco-nut fibre, and so is the bottom part of the points, between which a tuft of coco-nut fibre is wedged fast. In No. 55 one of the points is broken off close to the base, another just below the extreme point. — The dimensions of the two arrows are: No. 55 (1799. 2. 45), total length, 137 cm., of which the shaft occupies 108 cm. Thickness of shaft, at the butt end, 8 mm., at the fore end, 10 mm. No. 56 (1799. 2. 46), total length, 139.5 cm., the shaft being 110 cm. Thickness of shaft at the butt end, 10 mm., at the fore end, 13 mm.

The basket here included under the heading "Tanna", *No. 57* (1799. 2. 43), and entered by Sparrman in his original inventory as "sacce d'ouvrage" is not mentioned in his travel account. This does not necessarily prove that it does not form part of his collection, which it with absolute certainty does. It may not, on the other hand, be equally certain that it comes exactly from Tanna, even though he may have bought it in that island. The real facts of this case I have, however, been unable to ascertain. In his book, "Ethnographische Materialen", Speiser does not refer to any basket or satchel that resembles it in the least. According to his letter of July 4 of this year, Dr. Speiser himself is unable to determine the origin of this basket. The present writer not having anywhere in the literature been able to find any reference to a basket similar to the one we are here concerned with, Sparrman's statement as to its provenance must stand as it is. — The basket has double walls, which along the edge of the rim merge into each other. Its construction will be apparent from the photograph in the plate and the illustrations in the text (fig. 5). The length of the basket is about 30 cm., its width is ca. 6 cm., and height ca. 10 cm. Its mouth measures 16.5 cm. in length and 4.5 cm. in width.

No. 58 (1799. 2. 41), the last object but one of the Sparrman collection, the necklace from Tanna, is a chain of 51 flat, polished annular links of tortoise-shell. A chain where at least every other link seems to consist of similar rings is found in a copperplate engraving in Sparrman (II: 2, Table 10), according to the subscription representing "A married woman of Tanna". This picture is, by the way, reproduced from Cook (A voyage towards the South Pole, London 1777. Vol. II, p. 80, Plate XLV: "Woman of Tanna"). The same applies to nearly all the plates in Sparrman's book. — The total length of the chain is 93 cm. The outer diameter of the links varies between 28 and 30 mm., their inner diameter between 17 and 22 mm. Their thickness varies between 1 and 4 mm.

The last object of the collection is a triangular comb of tortoiseshell, from Tanna. It is listed as *No. 59* (1799. 2. 42) and illustrated on Plate XII, fig. 2. It originally had 14 teeth, two of which are now broken off. The upper half of the comb is ornamented with engraved rows of double lines, interfoliated with oblique cross lines, in a way distinctly seen from the picture. The apex of the upper part of the comb terminates in a small widening, possibly designed to provide a fastening for a string for the suspension of the comb. — The total length of the comb is 18.4 cm. The length of the teeth is ca. 7.7 cm., and their thickness about 3 mm.

Of this comb I have not been able to find any counterpart in the literature, but neither have I any particular reason for doubting its Tanna origin, as given by Sparrman. The material of which it is made, viz. tortoise-shell, is what would be mostly apt to make us suspect some other origin. Both Speiser and Sarasin describe combs from New Hebrides and New Caledonia, but in neither of them are found combs of tortoise-shell, though certainly of bamboo or coco-nut leaflet mid-ribs. The necklase from Tanna, just described above, composed of rings of tortoise-shell, proves that in that island ornamental objects were occasionally made of this material, considering which it is probable that also this comb comes from Tanna.

CONCLUDING NOTE

With the above description of the tortoise-shell comb from Tanna, the writer's review of the material of the collection brought back by Sparrman must be considered as having been brought to an end, at any rate for the time being. Because of the paucity of the material and the vastness of the area from which the various objects are collected — from Tanna and New Caledonia in the west, to Marquesas Islands in the east and New Zealand in the south — the author has not considered it possible to achieve any valuable result in the way of comprehensive and surveyable inductions. I have therefore given up the idea of attempt such a thing, and must leave to the reader to accept or reject the views I have presented in the concluding chapter of this book. For I am fully aware that in some instances I have drawn conclusions to which more experienced investigators might perhaps not have arrived, and which at some future time I myself may possibly reconsider. Owing to the limited character of the material at my disposal, and having within my reach only part of the literature needed for drawing conclusions of wider scope, it has not been possible to accomplish anything better. Lastly, I cherish the hope of not having to any inordinate extent stumbled into the fourth of the pitfalls that Burrows enumerates on p. 7 in his essay, here cited, where he says that "lack of first-hand acquaintance with any of these cultures can easily lead to naive misinterpretation, as the literature of indoor anthropology abundantly shows."

ADDENDUM

This additional note has been written only because the author thought it fitting in the final illustration (Pl. XXIV) to reproduce both sides of the medal struck in England to commemorate Cook's second expedition, and of which a specimen is preserved in the Ethnographical Museum of Sweden, along with the Sparrman collection. It is true that this medal cannot be counted among the ethnographical objects of the collection but as it was however struck in commemoration of the eventful voyage during which the objects in question were collected, and as the author does not know how many specimens of the medal there still may be in existence he has incorporated it herewith.

To the medal are attached a piece of cardboard and a slip of paper. Each of these is provided with lettering written in red ink, probably by Sparrman himself. I here render them both, in translation. On the piece of cardboard it says: "Medal struck in commemoration of the voyage round the earth to the South Pole, for presentation to the kings of the Indians". On the paper slip we read: "Struck for distribution among Indian chieftains on the islands that were to be discovered, to commemorate and record the voyage that now for the first time was undertaken with an easterly course round the terrestrial globe. — The Antarctic circle to 71° South was crossed and, beside other things, an Ultima Thule Australis was visited for the first, and last, time."

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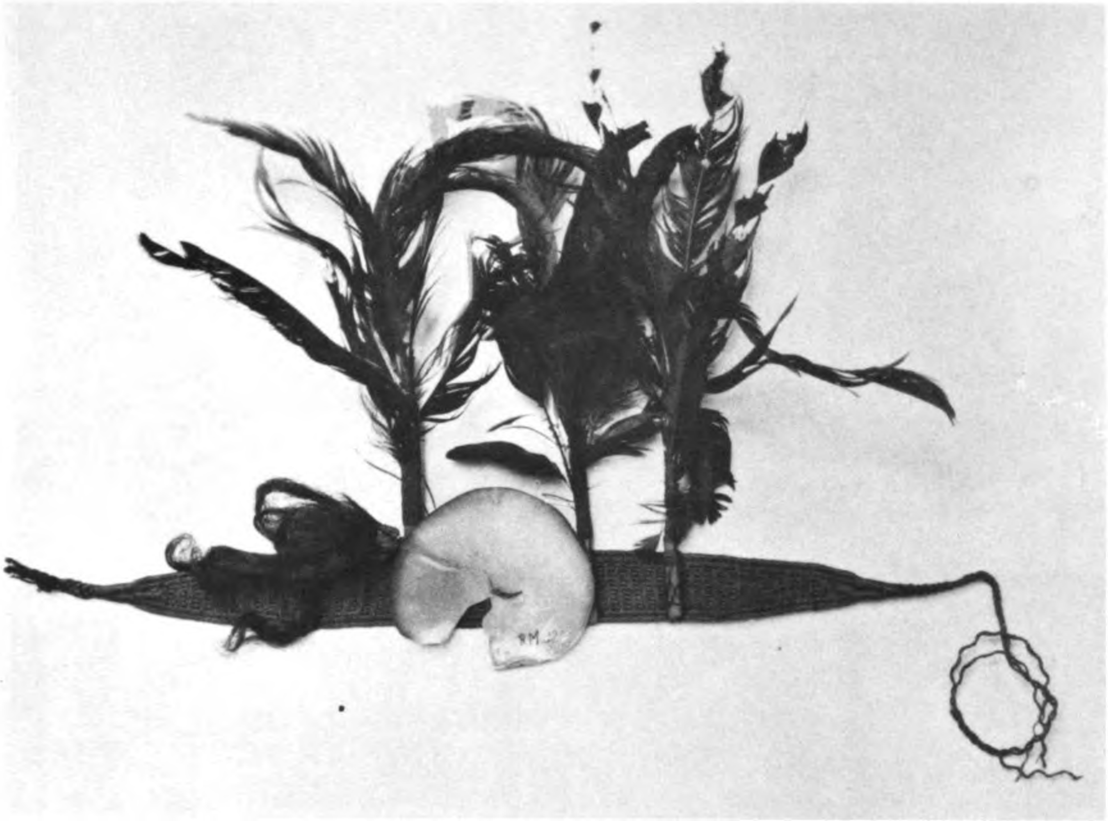

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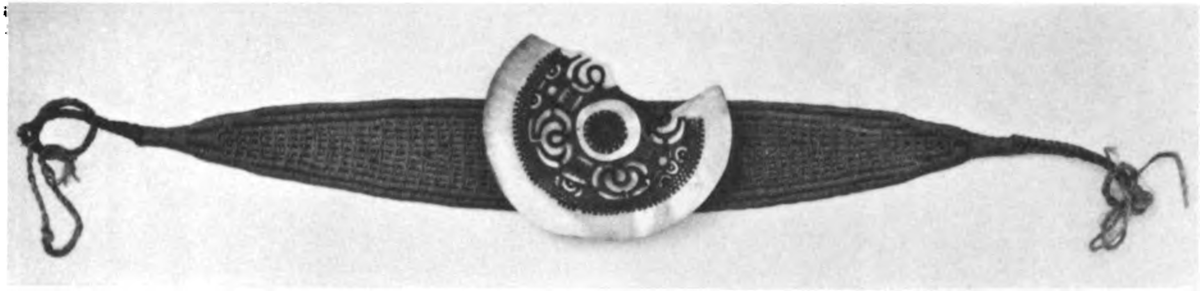
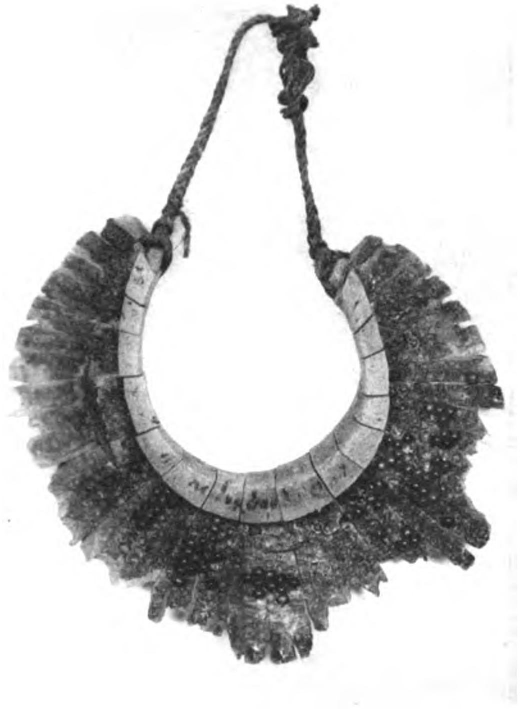


2.

I. Mother-of-pearl diadem with cock feathers, the Marquesas Islands, (Nr. I).
2. Mother-of-pearl diadem, the Marquesas Islands, (Nr. 2).

Plate II.



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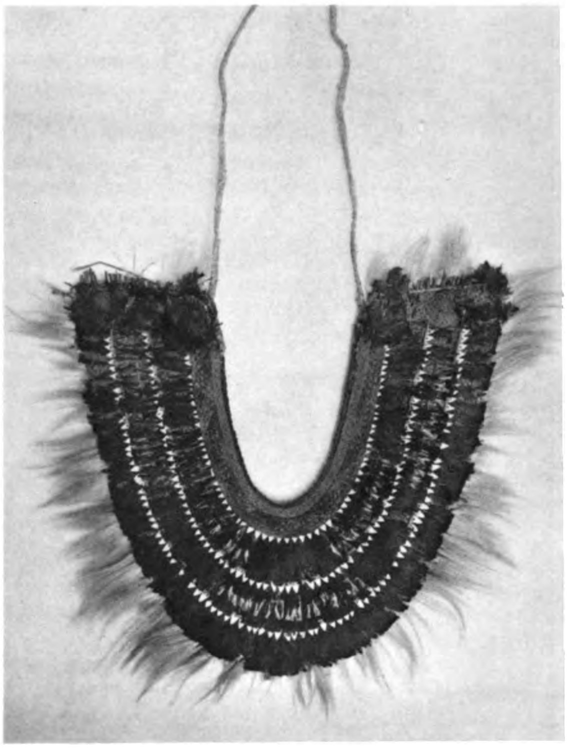

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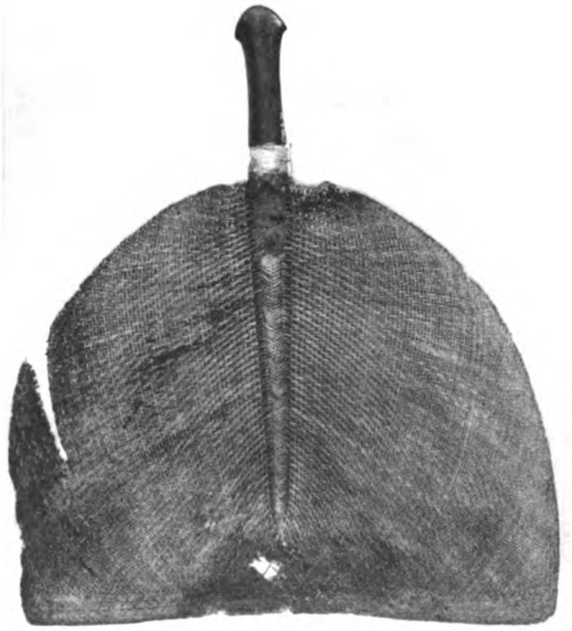
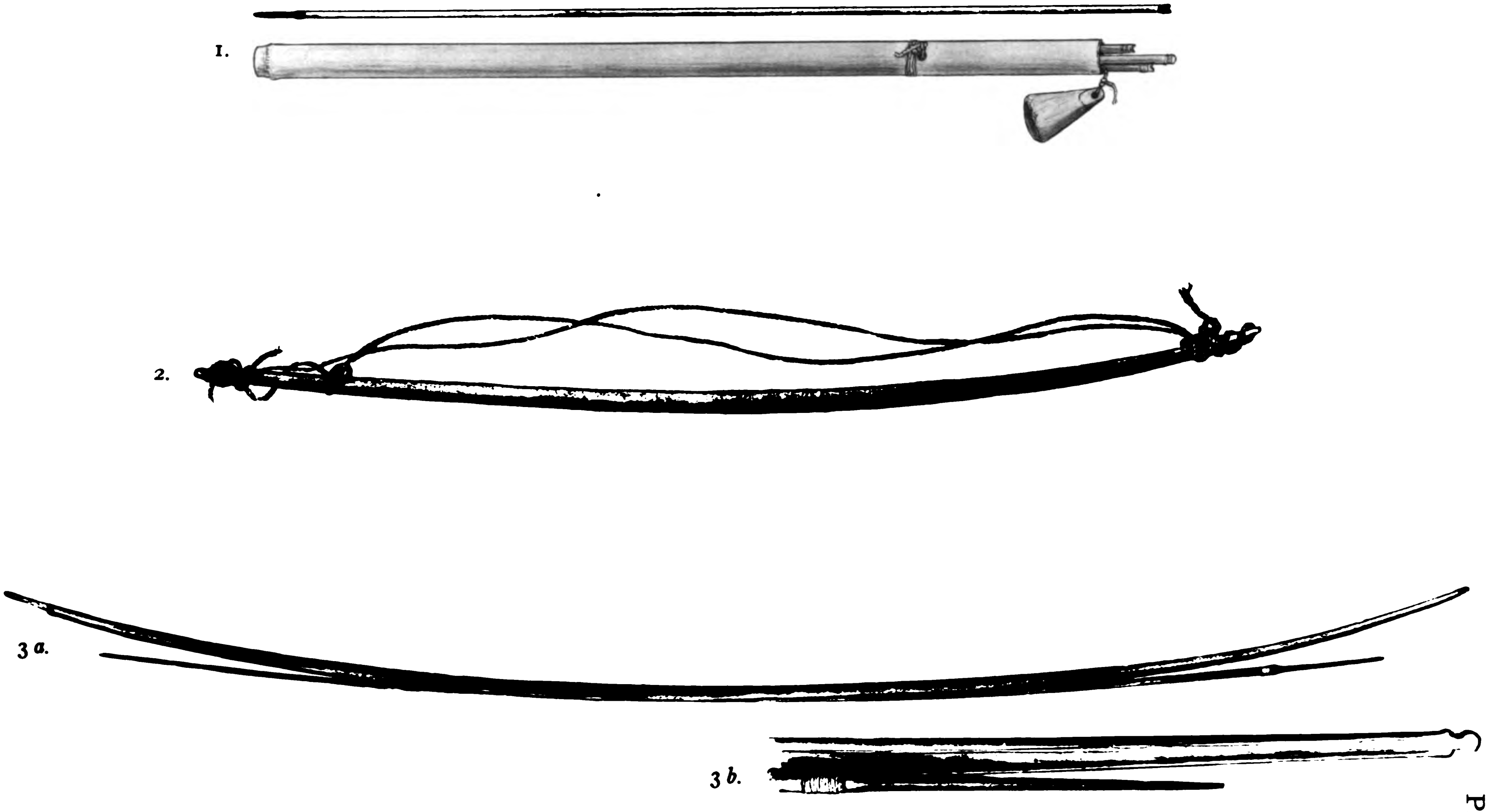


3.

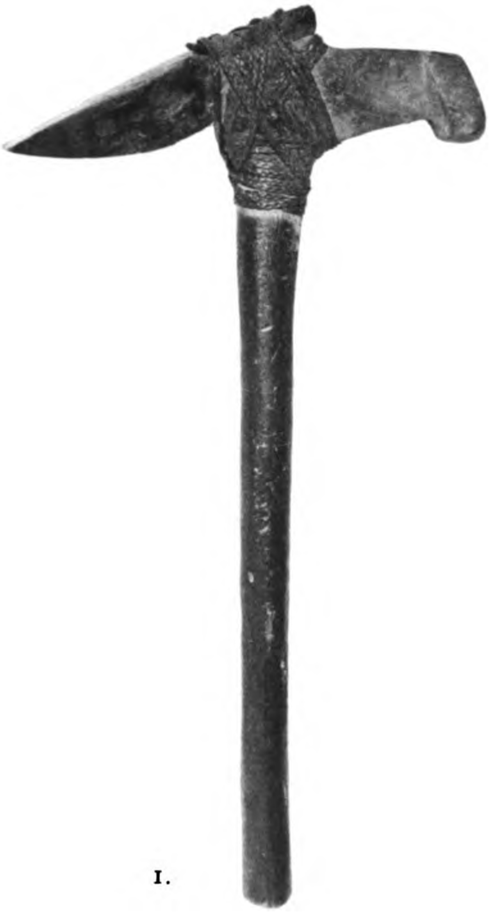
1. Wooden breast ornament (gorget), the Marquesas Islands, (Nr. 3). 2. Breast ornament, decorated with feathers and shark teeth, the Tahiti Islands, (Nr. 22). 3. Fan, the Marquesas Islands, (Nr. 4).

Plate III.



1. Quiver with three arrows, the Tahiti Islands, (Nrs. 6—9). 2. Bow, the Tahiti Island, (Nr. 5). 3. Bow and arrow, the Tonga Islands, (Nrs. 25, 26).

Plate IV.



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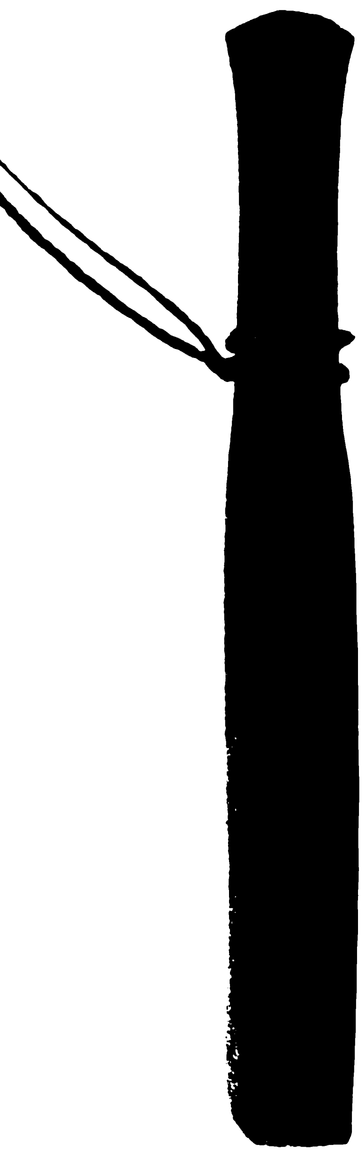

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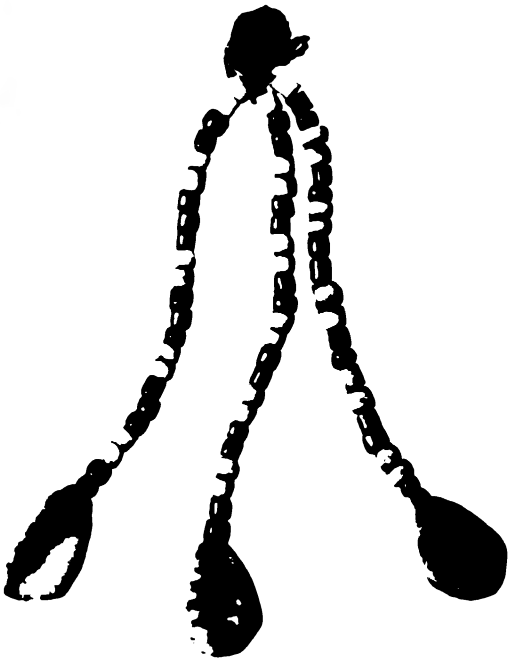
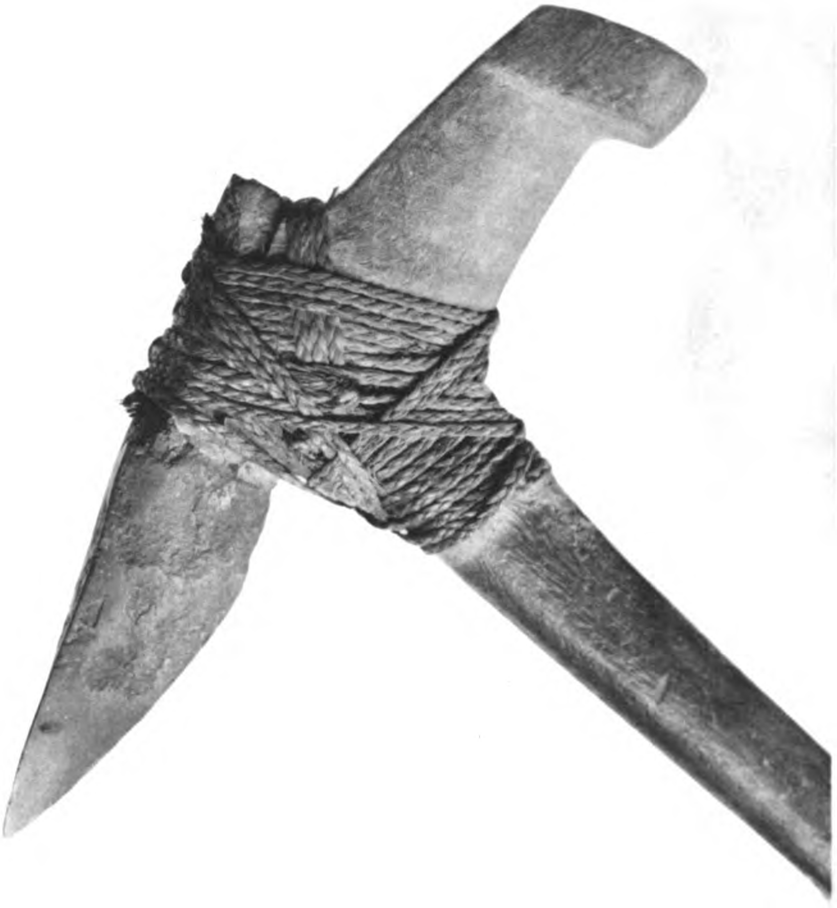
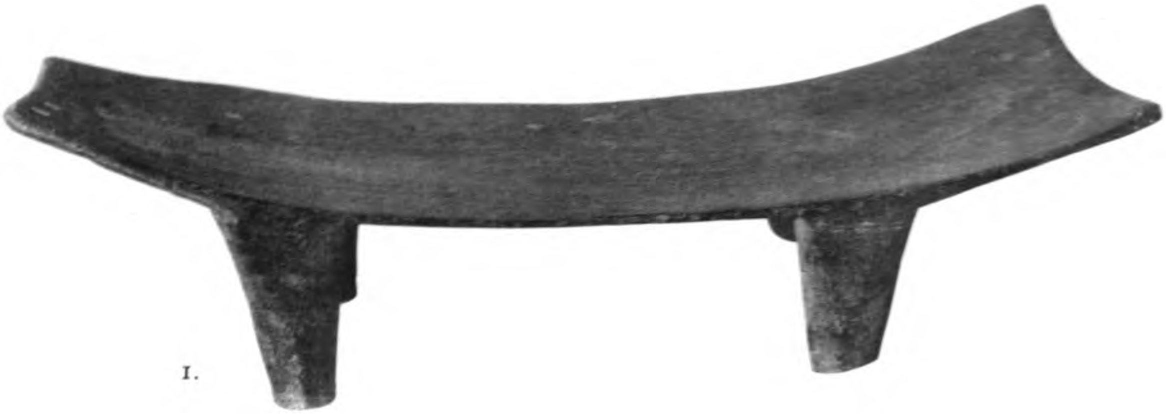


3.

1. Adz, the Tahiti Islands, (Nr. 10). 2. Tapa mallet, the Tahiti Islands, (Nr. 12).
3. Ear ornament of Cypraea moneta, and glass beads, the Tahiti Islands, (Nr. 17).



Showing the original lashing of the Sparrman Tahiti adz almost completely intact.



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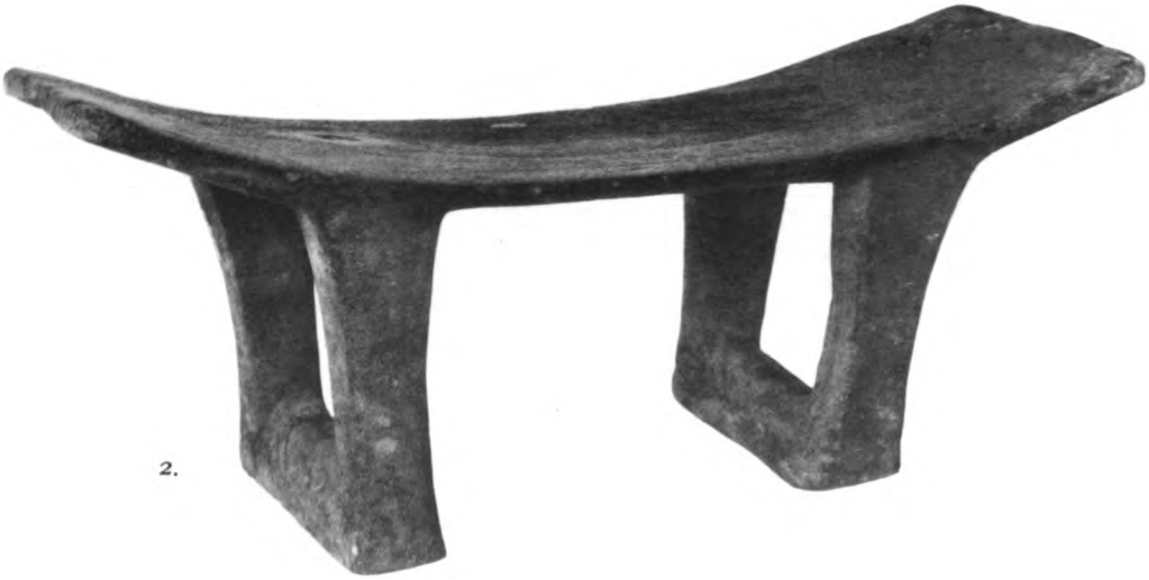
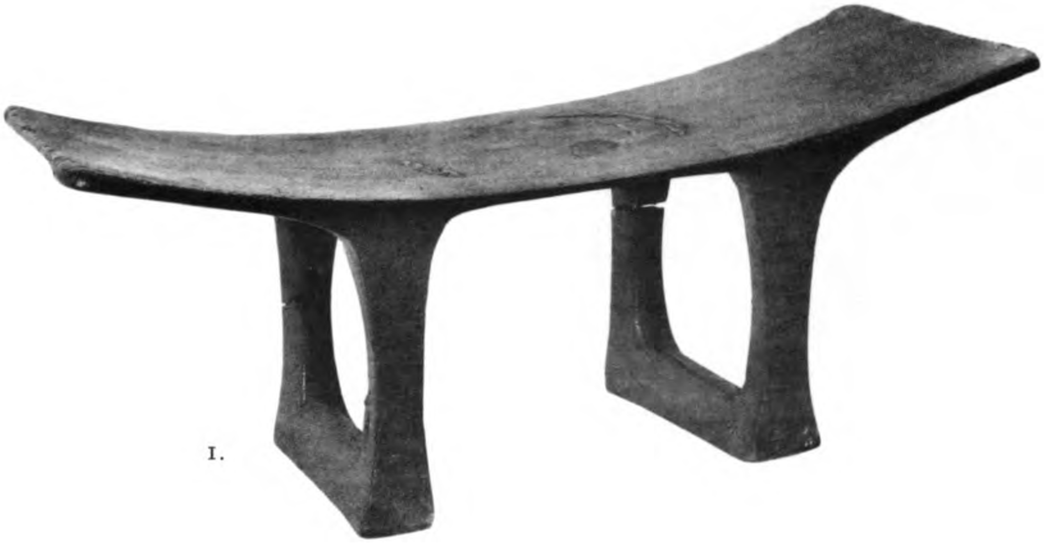


2.

1. Low, wooden stool, the Tahiti Islands, (Nr. 13). 2. Low, wooden stool, the Tahiti Islands, (Nr. 14).

Plate VII.



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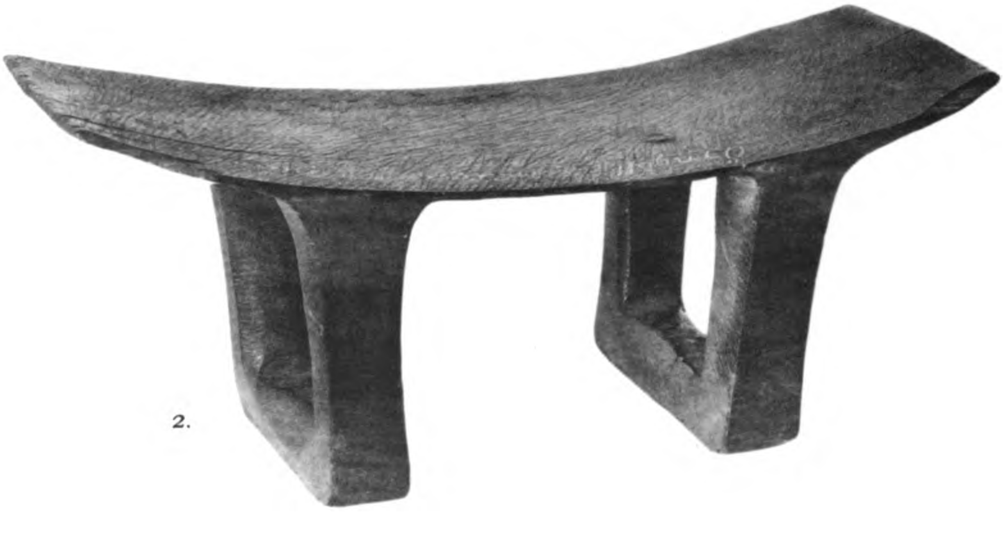
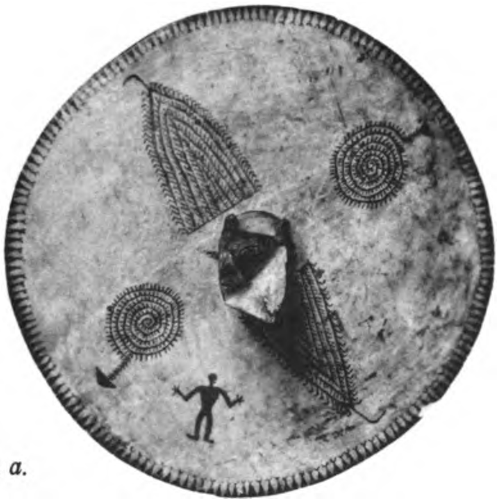


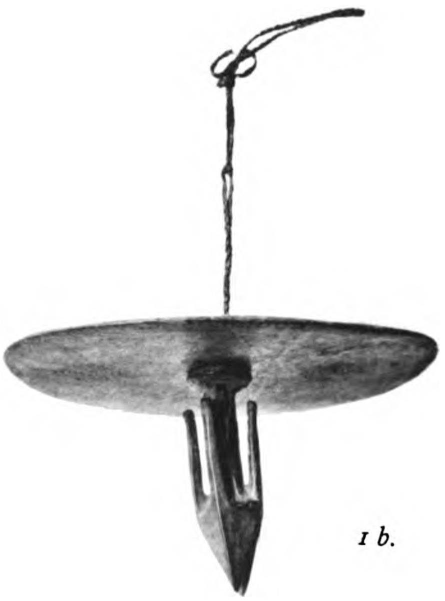
2.

1. Wooden pillow, the Tahiti Islands, (Nr. 15). 2. Wooden pillow, the Tahiti Islands, (Nr 16).

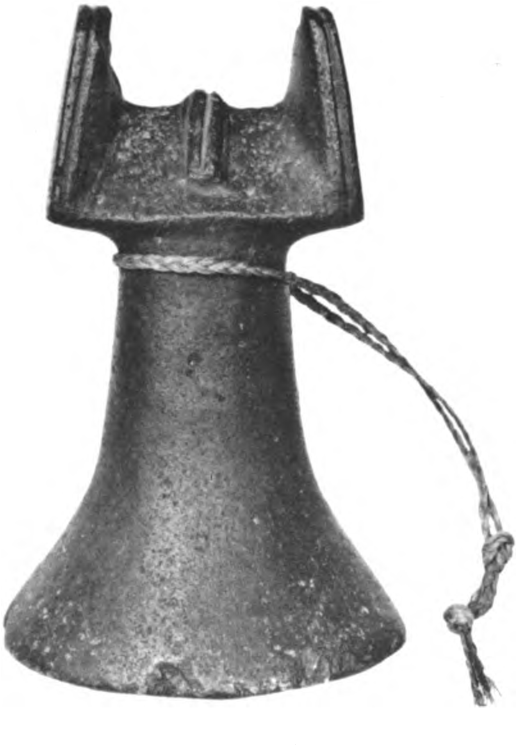
Plate VIII.



1 *a.*



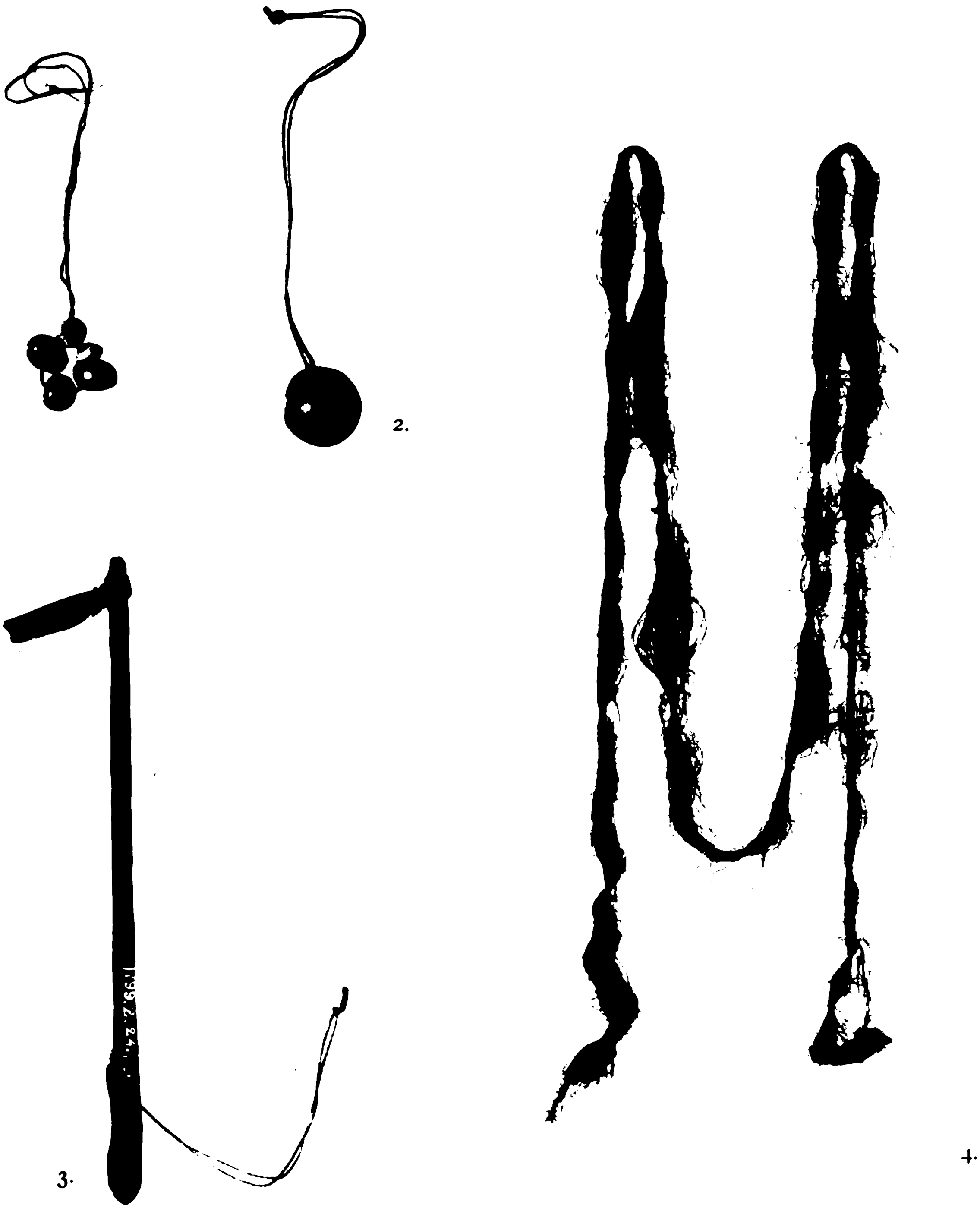
1 b.



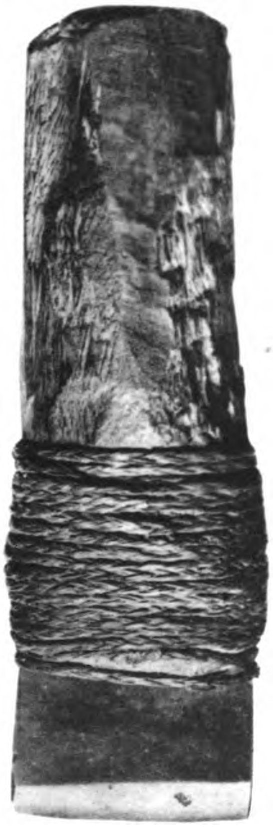
2.

1 : a, b. Rat-safe, the Tonga Islands, (Nr. 28). 2. Poi-pounder, the Tahiti Islands, (Nr. 11).

Plate IX.



1. Ear ornament, the Tahiti Islands, (Nr 18). 2. Ear ornament, the Tahiti Islands, (Nr 19). 3. Tattoing comb, the Tahiti Islands, (Nr. 20). 4. Head-dress of black human hair, the Tahiti Islands, (Nr. 21).



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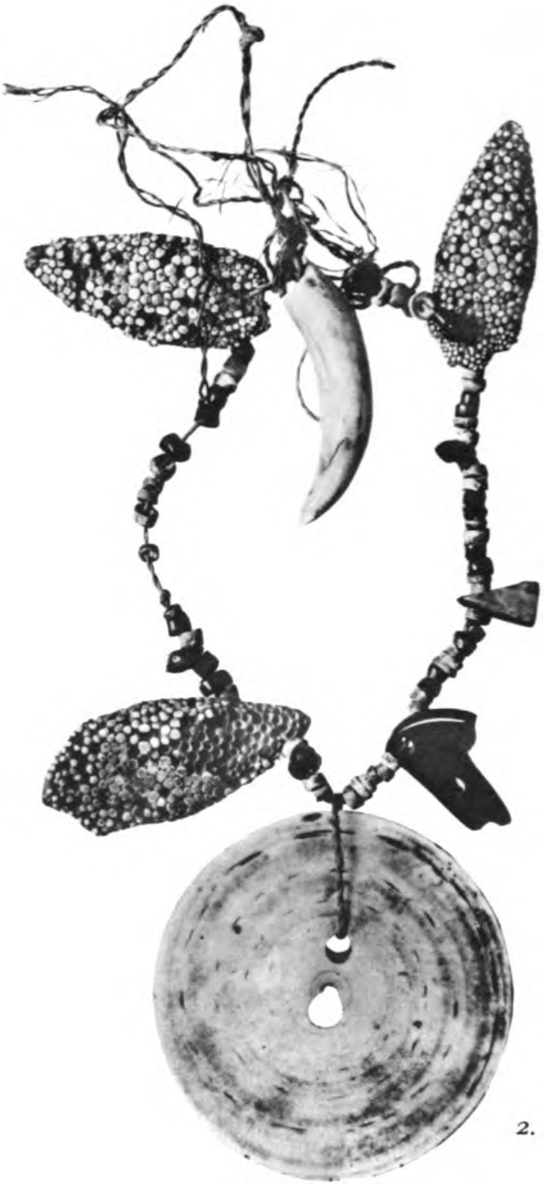
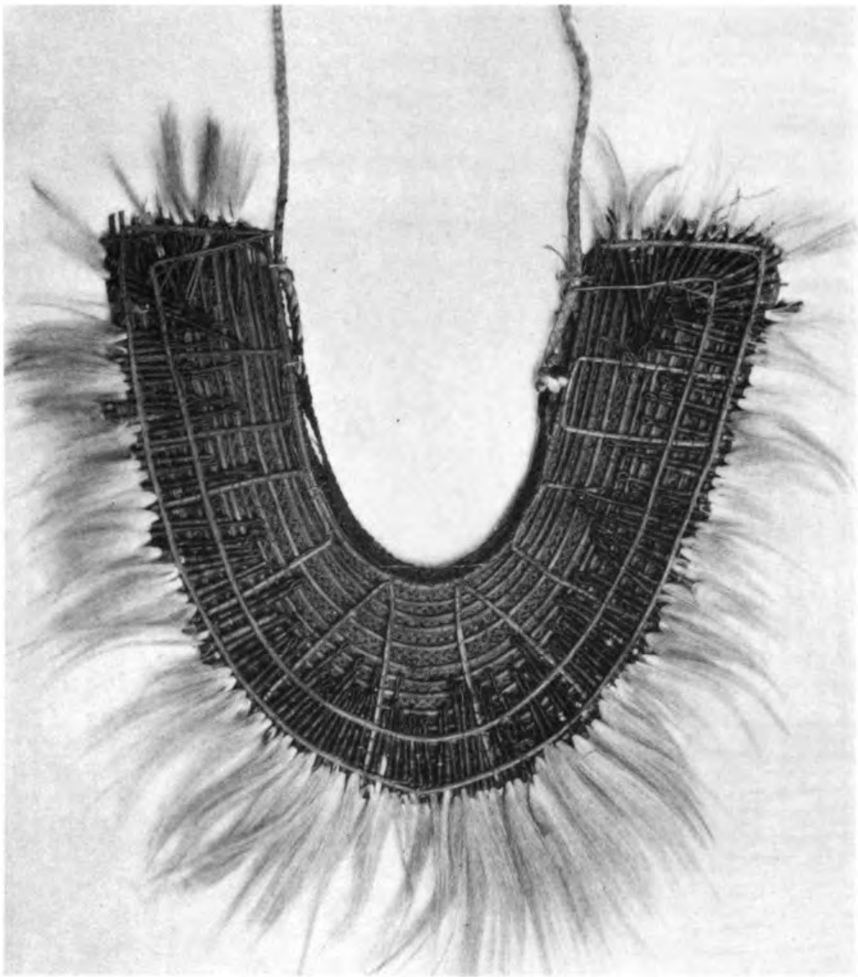


2.

1. Chisel (of basalt, with wooden handle), the Tonga Islands, (Nr. 27).
2. Bracelet, the Tonga Islands, (Nr. 40).



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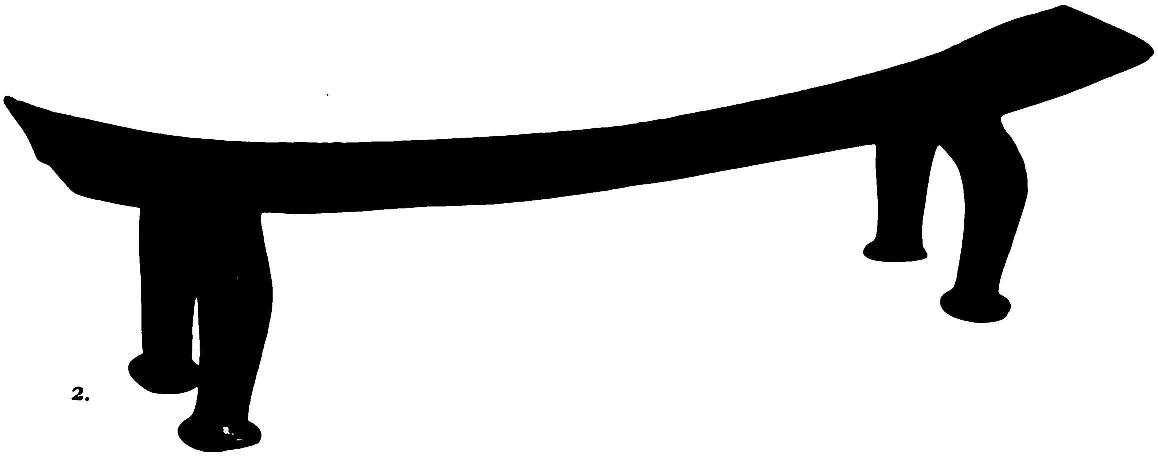
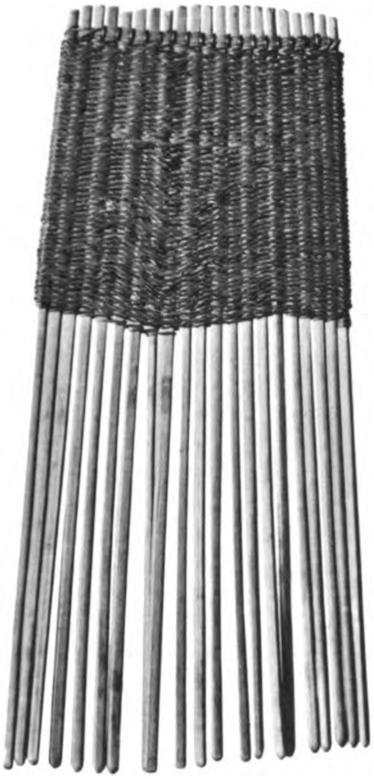


2.

1. Back side of breast ornament Plate II, Fig. 2, the Tahiti Islands, (Nr. 22).
2. Wooden pillow, the Tonga Islands, (Nr. 32).

Plate XII.



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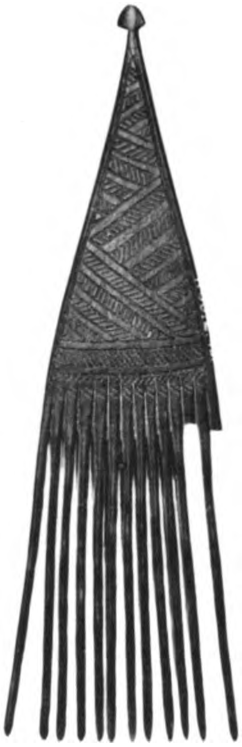

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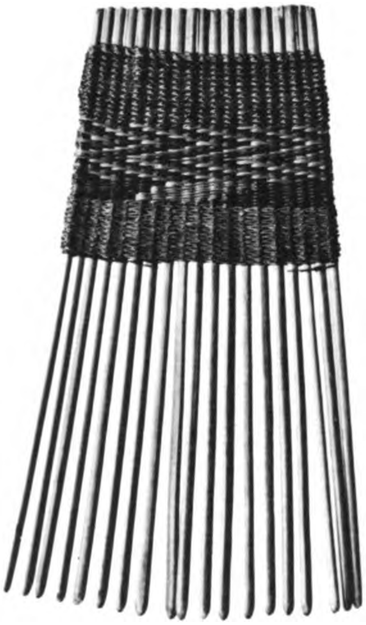

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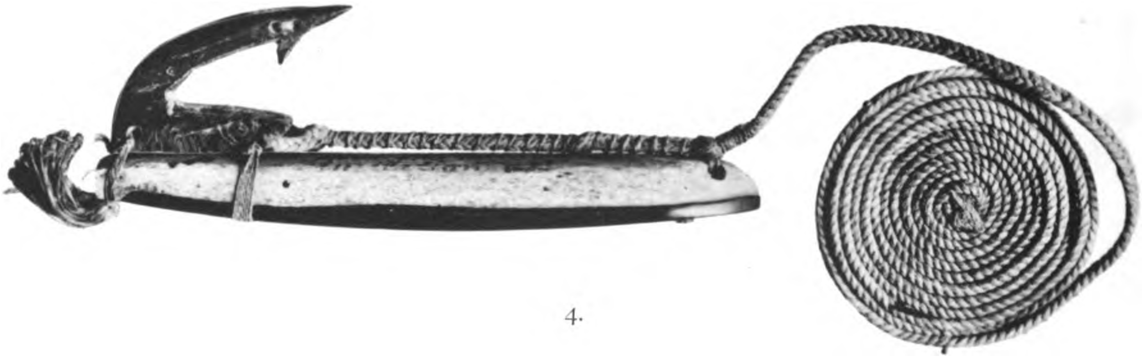
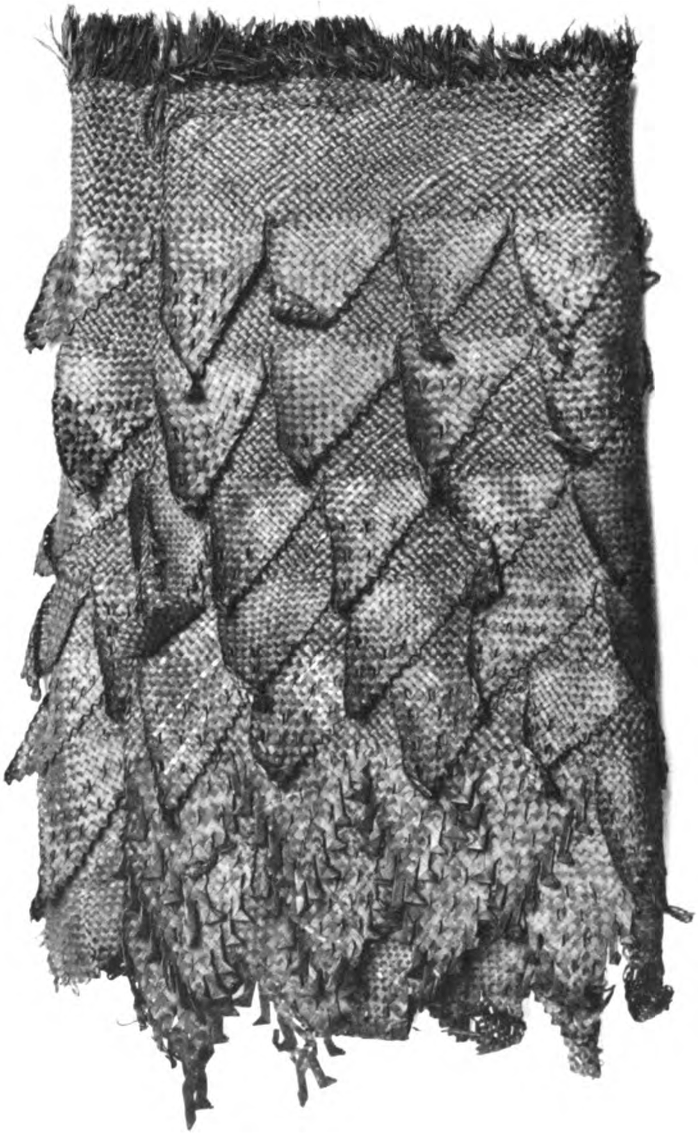


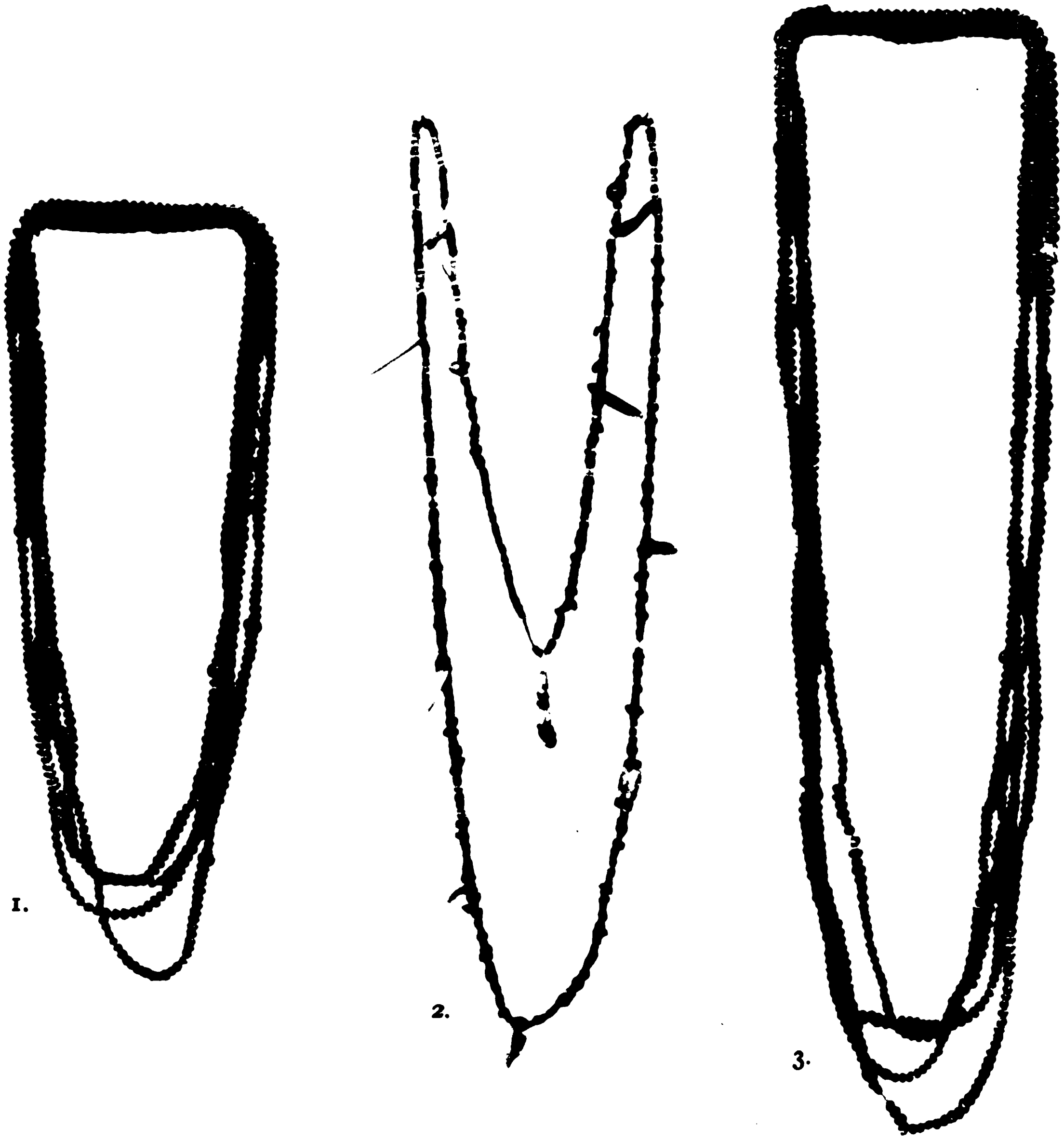
4.

1. Comb, the Tonga Islands, (Nr. 33). 2. Comb, of tortoise-shell, Tanna, (Nr. 59).
3. Comb, the Tonga Islands, (Nr. 34). 4. Trolling hook (composite),
the Tonga Islands, (Nr. 29).



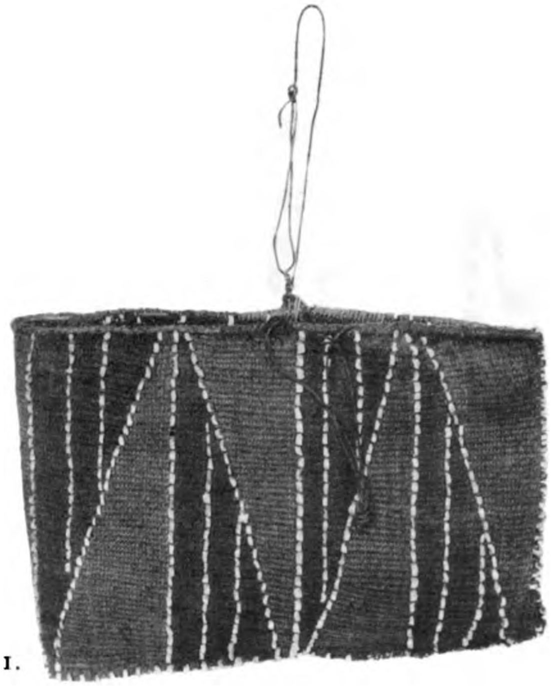
Garment, the Tonga Islands, (Nr. 35).

Plate XIV.



1. Necklace, the Tonga Islands, (Nr. 37). 2. Necklace, the Tonga Islands, (Nr. 38). 3. Necklace, the Tonga Islands, (Nr. 36).

Plate XV.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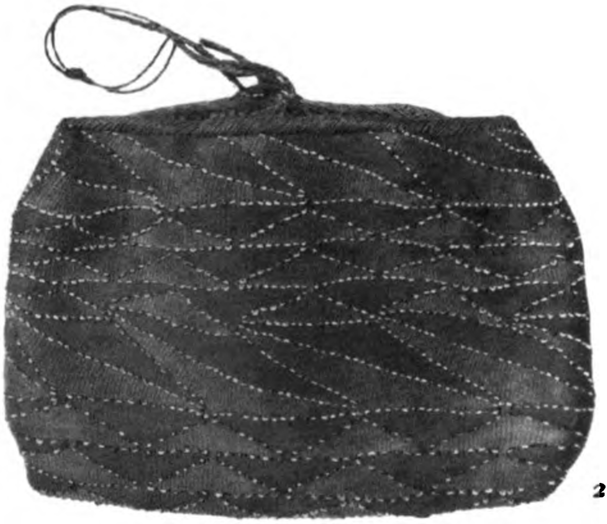
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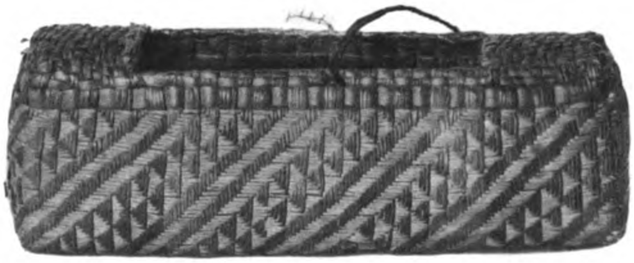
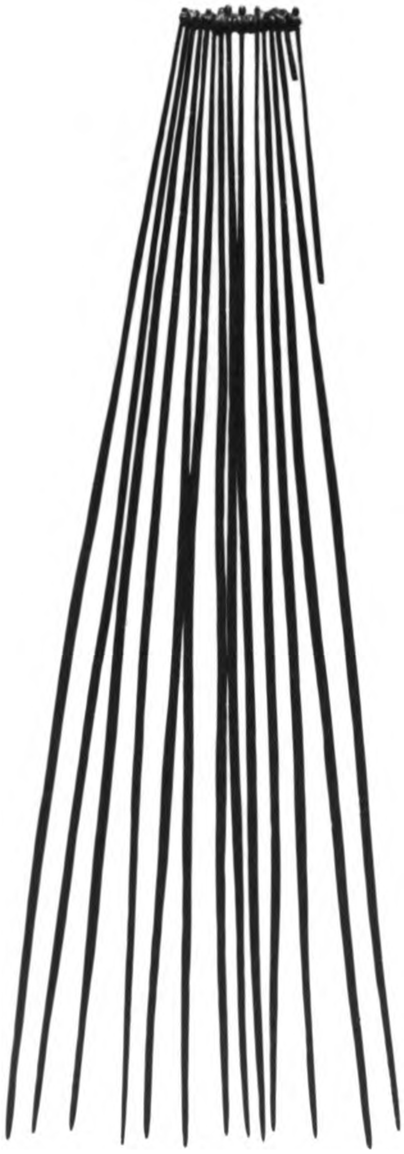

3.

1. Basket, the Tonga Islands, (Nr. 42). 2. Basket, the Tonga Islands, (Nr. 41).
3. Basket, Tanna, (Nr. 57).

Plate XVI.



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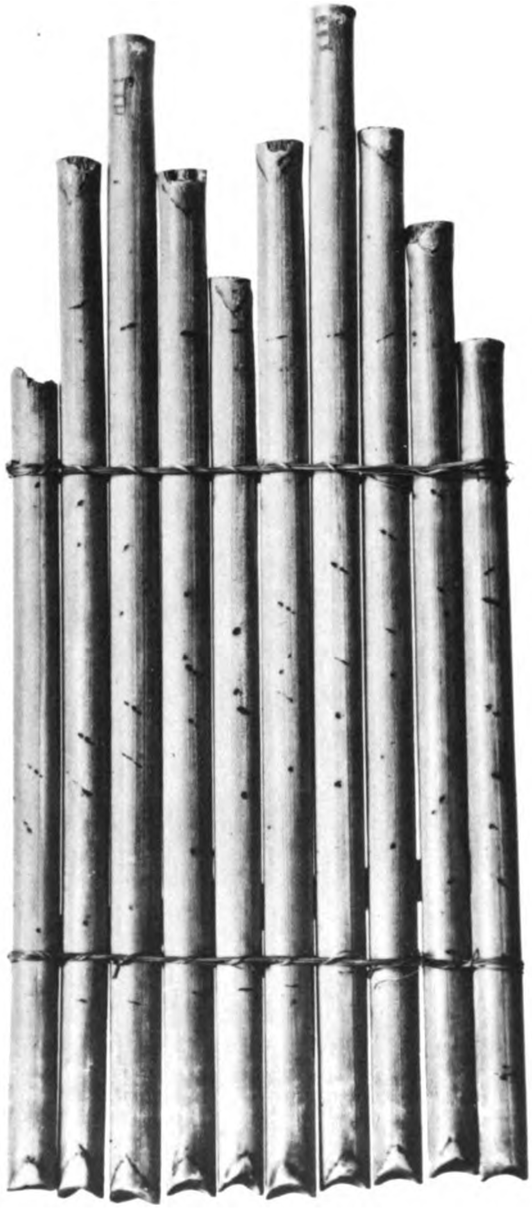
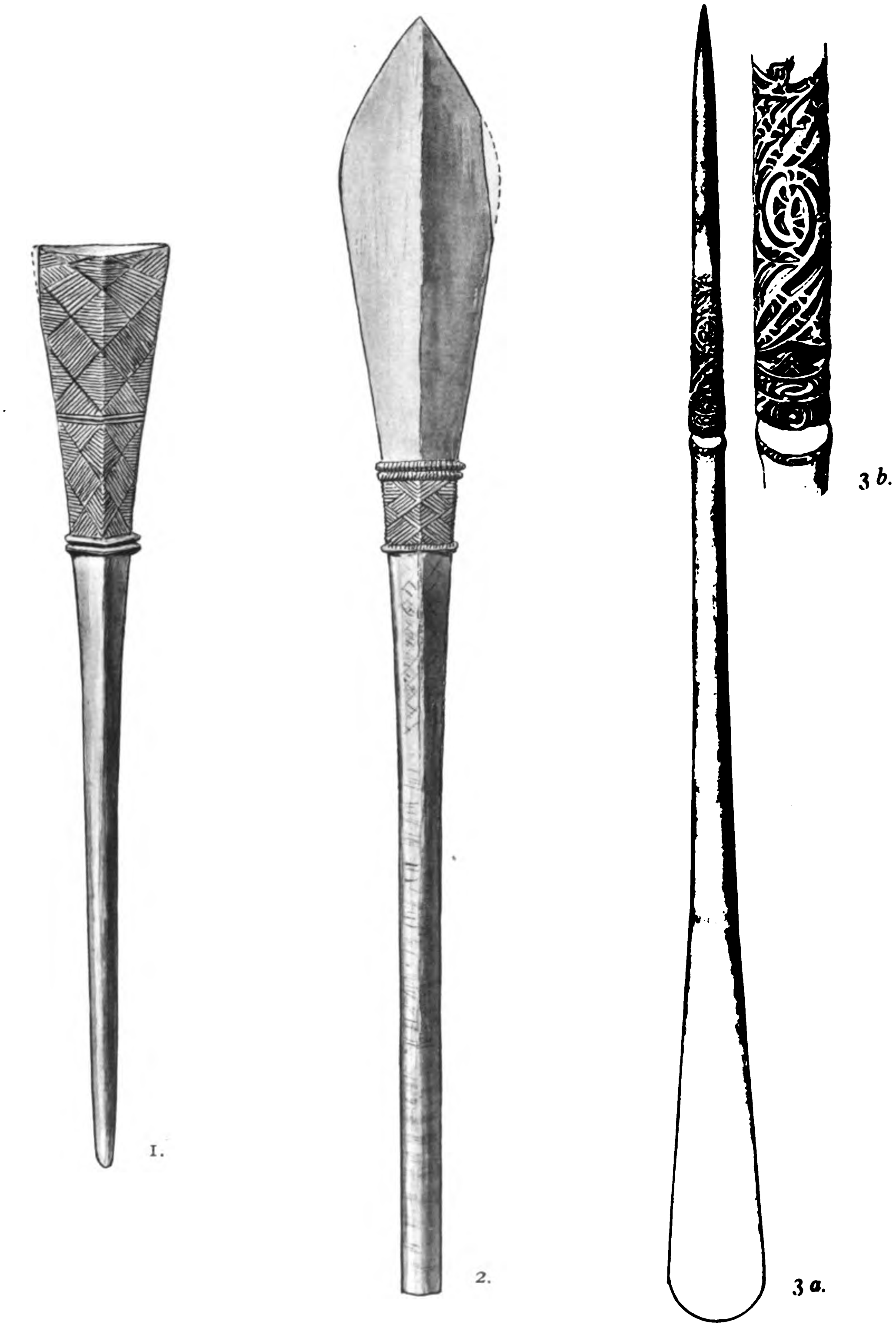


2.

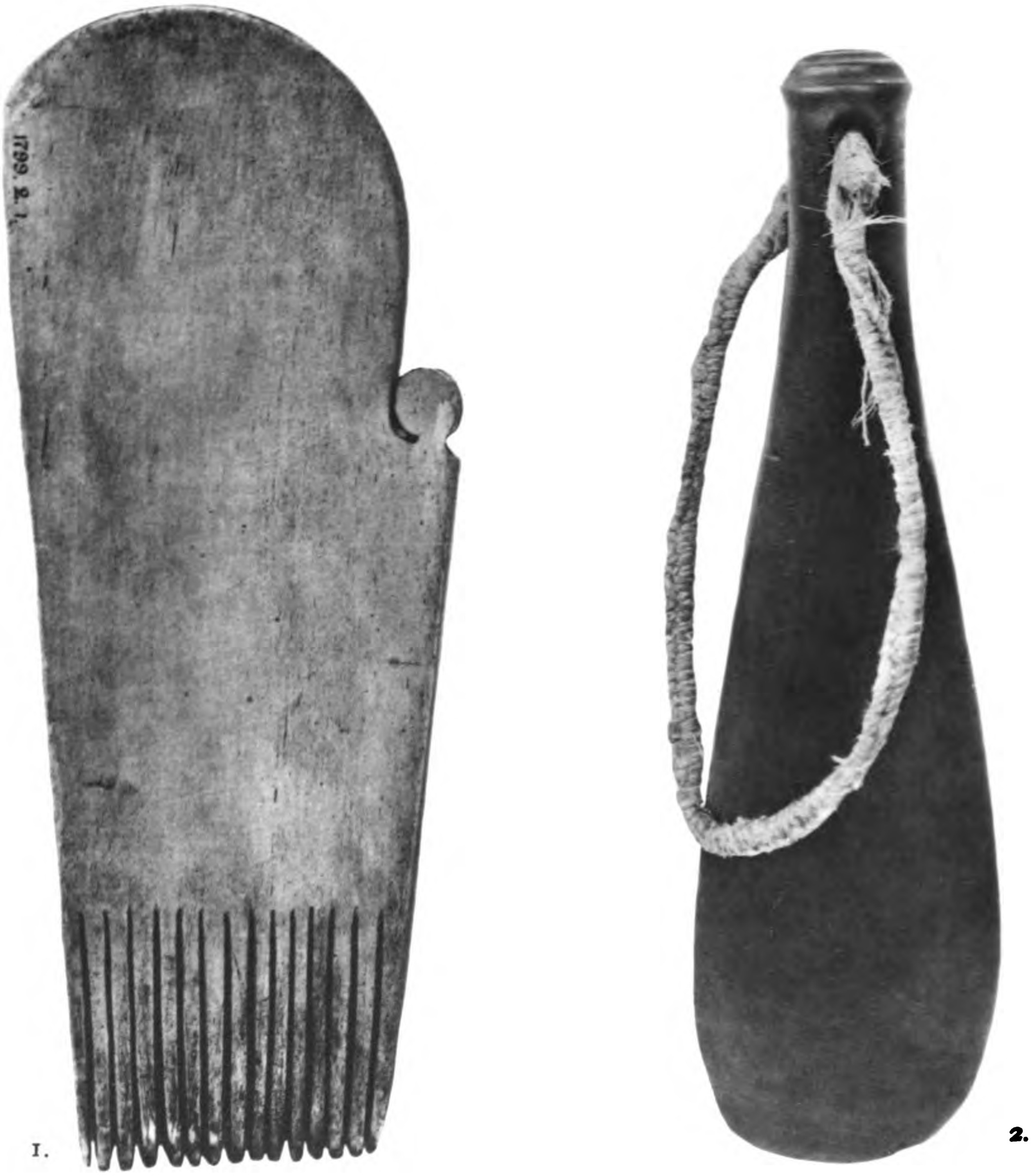
1. Comb with movable teeth, New Caledonia, (Nr. 52). 2. Pan-pipe, the Tonga Islands, (Nr. 31).

Plate XVII.



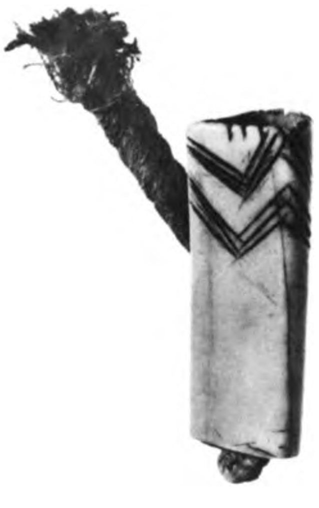
1. War club, the Tonga Islands, (Nr. 23). 2. War club, the Tonga Islands, (Nr. 24). 3 : a, b. Wooden weapon, *Pouwhenua*, New Zealand, (Nr. 43).

Plate XVIII.



1. Comb, of whalebone, New Zealand, (Nr. 49). 2. War club, *Mere*, of polished basalt, New Zealand, (Nr. 44).

Plate XIX.



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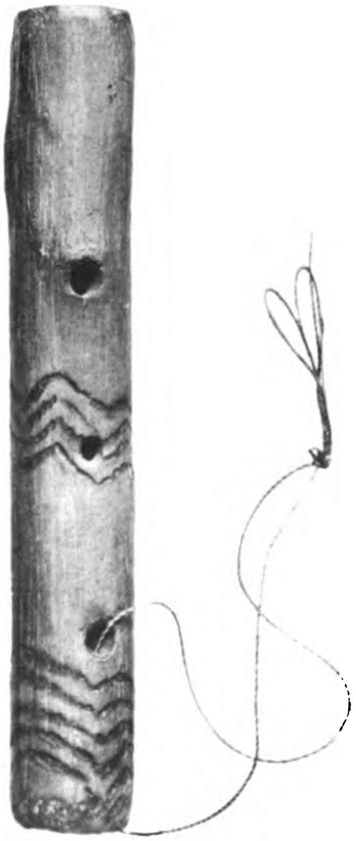

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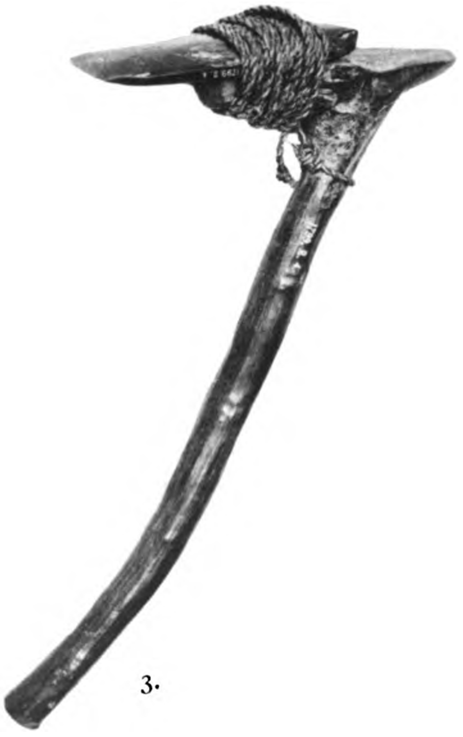
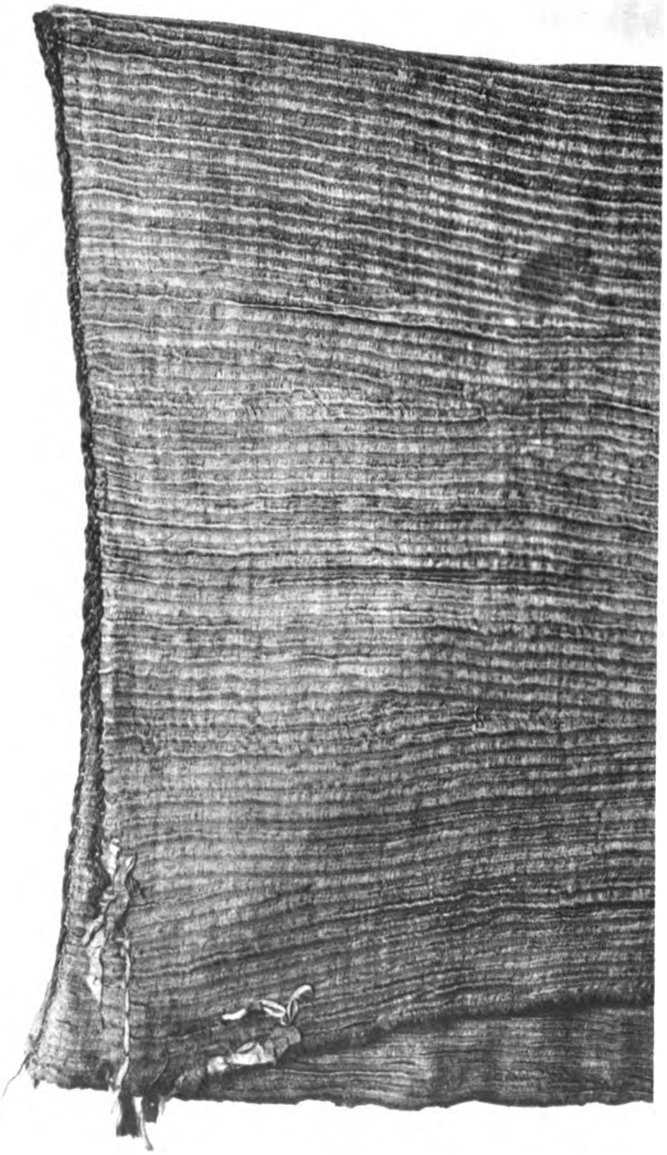


3.

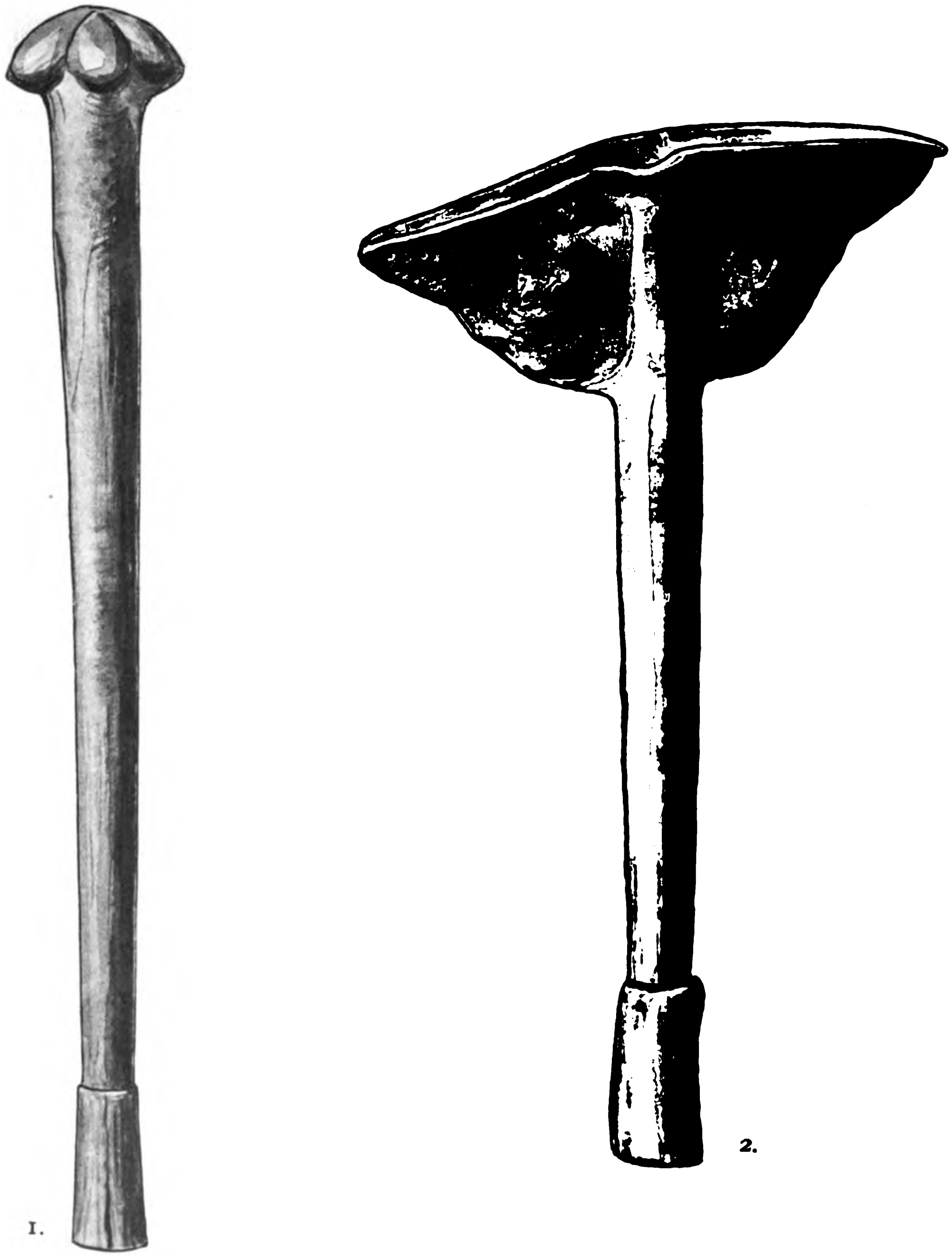
1. Toggle, of bone, New Zealand, (Nr. 48). 2. (Nose-)flute, of wood, New Zealand, (Nr. 47). 3. Adz, of greenstone with wooden handle, New Zealand, (Nr. 45).

Plate XX.



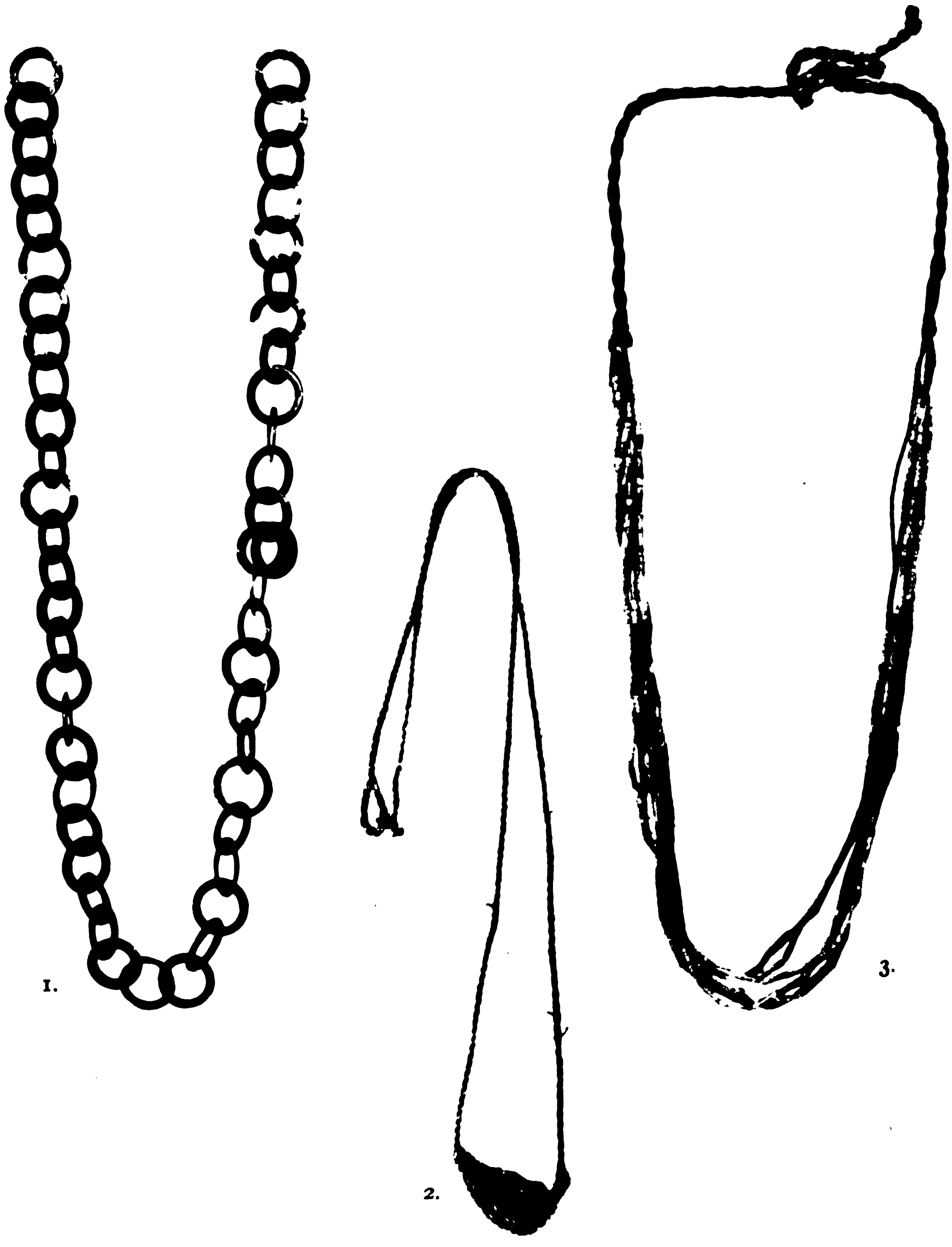
Mantle, of Phormium tenax, New Zealand, (Nr. 46).

Plate XXI.



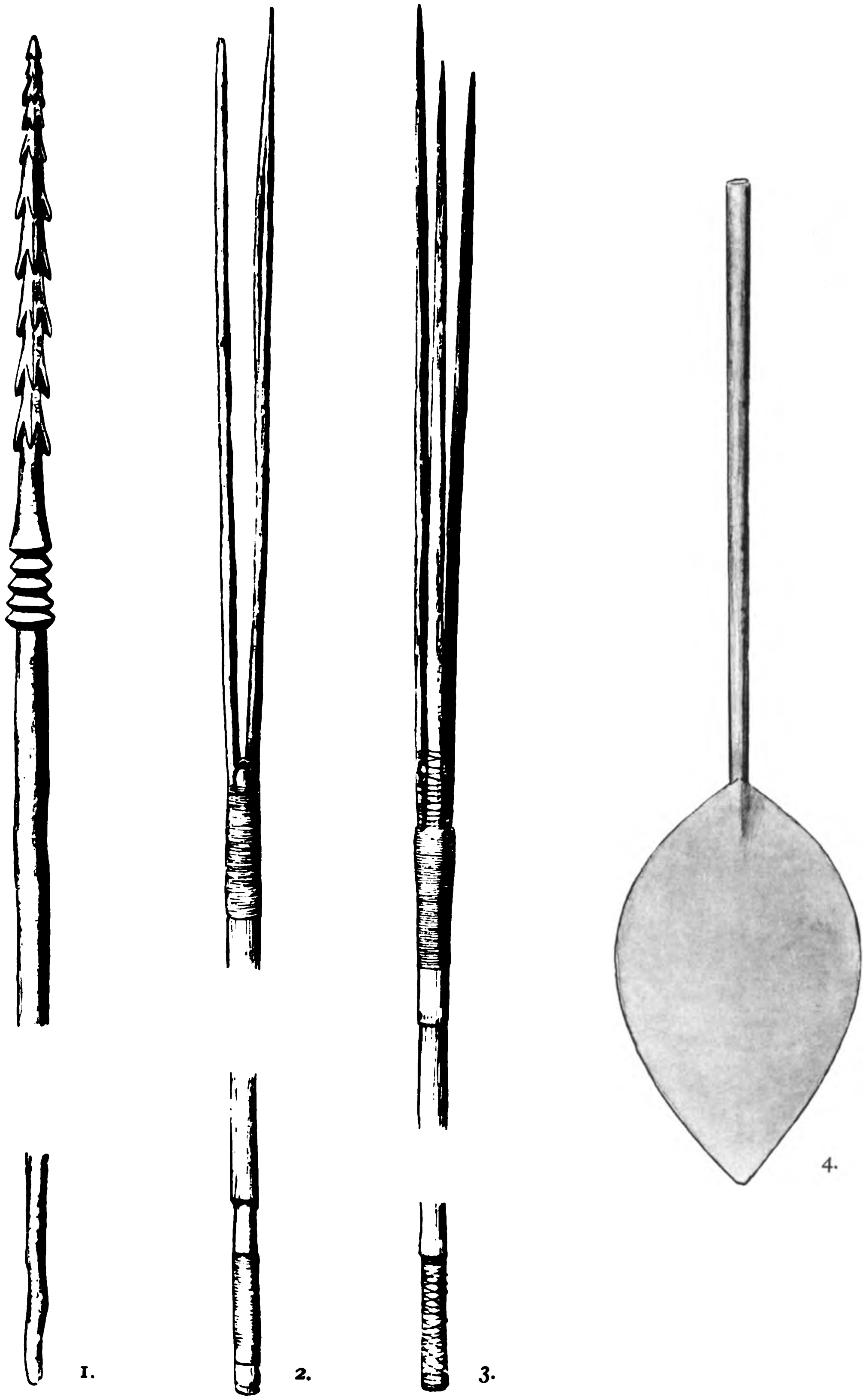
1. War club, of wood, New Caledonia, (Nr. 50). 2. War club, of wood, New Caledonia, (Nr. 51).

Plate XXII.



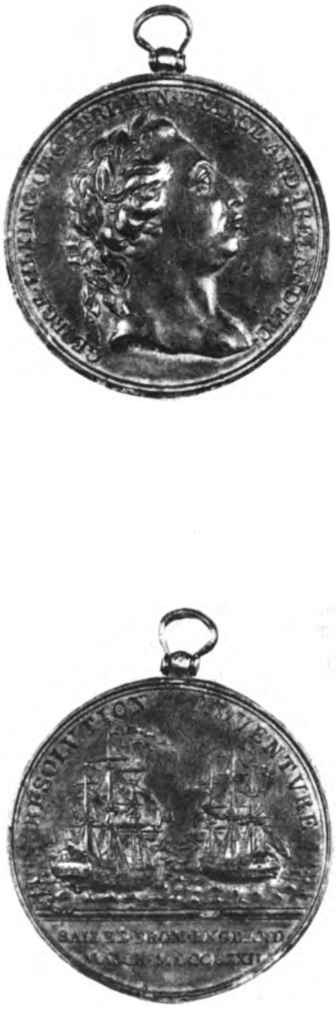
1. Necklace, of rings made of tortoise-shell, Tanna, (Nr. 58). 2. Stone sling, Tanna, (Nr. 53). 3. Necklace, the Tonga Islands, (Nr. 39).

Plate XXIII.



1. Spear, Tanna, (Nr. 54). 2. Fish arrow, Tanna, (Nr 55). 3. Fish arrow, Tanna, (Nr 56). 4. Canoe-paddle, the Tonga Islands, (Nr. 30).

Plate XXIV.



Both sides of the medal struck in England to commemorate Captain James Cook's second expedition. (See also "Addendum", in the text!)

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